

DOS III JOB PROCESSOR
(REV A)

BINARY TAPE	24307-60004
SOURCE TAPES	24307-80022
	24307-80023
	24307-80024
	24307-80025
	24307-80026
	24307-80027
	24307-80028
	24307-80029
	24307-80030
	24307-80031
SOURCE LISTING	24307-90004

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0001

ASMB,L,X,C,N,R,B

DOS-III JOB PROCESSOR (JOBPR)

** NO ERRORS*

0001	ASMB,L,X,C,N,R,B	DOS=III JOB PROCESSOR (JOBPR)
0002	NAM JOBPR,3	
0003	SUP	
0004	EXT EXEC	
0005	ENT JOBPR	
0006*		
0007	A EQU 0	
0008	R EQU 1	
0009*		
0010	. EQU 53B	#0 (+AND= 1 THRU 10 FROM .)
0011	D17 EQU .+11	EQT LENGTH
0012	D64 EQU .+12	#B100
0013	R37 EQU .+14	MASK FOR LOWER 5 BITS
0014	R77 EQU .+15	#D63
0015	R177 EQU .+16	#D127
0016	R377 EQU .+17	#D255 (LOWER MASK)
0017	R1774 EQU .+18	UPPER MASK = -400B
0018*		
0019	* EQU 100B	START OF SYSTEM COMMUN. AREA
0020	LWAVL EQU *	LAST WORD ADDRESS AVAILBL MEMR
0021	JBINS EQU .+1	START TR/SEC OF JBIN AREA
0022*	*	JBINS=-1 AT END OF ASSEMBLY IF
0023*	*	THE JBIN AREA HAS OVERFLOWED.
0024	JBINC EQU .+2	CURRENT TR/SEC OF JBI"
0025	TBG EQU .+3	TIME BASE GEN. CHANNEL
0026	CLOCK EQU .+4	CURRENT SYSTEM TIME CLOCK
0027	CLEX EQU .+6	EXECUTION TIME CLOCK
0028	CXMX EQU .+8	MAXIMUM ALLOWABLE EXECUTION TIME
0029	BATCH EQU .+9	L. U. OF BATCH INPUT DEVICE
0030	SYSTY EQU .+10	L. U. OF SYSTEM TELETYPE
0031	DUMPS EQU .+11	ABORT /POST MORTEM DUMP FLAG
0032	SYSDR EQU .+12	SYSTEM DIRECTORY TRACK/SECTOR
0033	UDIRT EQU .+13	SYSTEM BUFFER TRACK/SECTOR
0034	SYSBF EQU UDIRT	
0035	SECTR EQU .+14	# OF SECTS/SCK
0036	EQTAB EQU .+15	FWA OF EQUIPMENT TABLE
0037	EQT# EQU .+16	# OF EQUIPMENT ENTRIES
0038	LUTAB EQU .+17	FWA OF LOGICAL UNIT TABLE
0039	LUT# EQU .+18	# OF LOGICAL UNIT ENTRIES
0040	JBUFF EQU .+19	JOB INPUT BUFFER ADDRESS
0041	JFILS EQU .+20	SOURCE FILE START TRACK/SECTOR
0042	JFILC EQU .+21	SOURCE FILE CURRENT TRACK/SECTOR
0043	RONBF EQU .+22	USER AREA FILE NAME INFORMATION
0044	EXPG EQU .+33	DIRECTORY ENTRY FOR CURRENT PROG
0045	DISCO EQU .+44	IO CHNL #/ LAST TRACK ON DISC
0046	SYSSC EQU .+45	
0047	LSTSC EQU .+46	LAST SUBCHNL ON SYSTEM
0048	UDNTS EQU .+47	NEXT USER DISC TRACK/SECTOR
0049	NXTTS EQU UDNTS	
0050	SYNTS EQU .+48	NEXT SYSTEM DISC TRACK/SECTOR
0051	SYSTS EQU SYNTS	
0052	CUDSC EQU .+49	CURRENT USER DISC SUBCHANNEL
0053	TSONE EQU .+60	NEXT T/S AVAILABLE
0054	GUDSC EQU .+61	
0055	JFLSC EQU .+63	JFILE SUBCHANNEL
0056	DISCL EQU .+64	POINTS AT USER BUFFER T/S

0057	00206	EQT4 EQU	+70	CURRENT DEVICE STATUS EQT ADDR.
0058	00236	NFLAG EQU	+94	FLAG FOR RUN TIME ABORT(0=ABORT)
0059	00245	EXMOD EQU	+101	
0060	00260	OPATN EQU	+112	
0061	00261	OPFLG EQU	+113	
0062	00262	SWAP EQU	+114	
0063	00266	EJOB# EQU	+118	
0064	00267	RTRK EQU	+119	SET = 0 FOR REAL TIME SIMULATION
0065	00313	MSECT EQU	+139	
0066	00323	EFMP EQU	+147	
0067	00326	LSTCH EQU	+150	FOR SLDE: 0=SYS DISC, NOT 0=USER
0068	00327	TRAK# EQU	+151	FILE VALIDITY FLAG
0069	00331	SSFLG EQU	+153	
0070	00333	TYEQ4 EQU	+155	
0071	00332	CHARC EQU	+232B	


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0073* *****
0074* * REQUESTS MADE TO 'EXEC' - GENERAL FORMAT - *
0075* * ( P ) JSB EXEC *
0076* * (P+1) DEF **N (RETURN ADDRESS) *
0077* * (P+2) DEF RCODE *
0078* * (P+3) DEF ERROR (READ/WRITE ONLY)ERROR ROUTINE LOCN. *
0079* * (P+4) DEF ETYPE (READ/WRITE ONLY)ERROR TYPE LOCN. *
0080* * (P+5) DEF CONWD CONTROL WORD LOCN. *
0081* * (P+6) DEF BUFFER (I/O ONLY) BUFFER LOCATION *
0082* * (P+7) DEF BUFFL (I/O ONLY) BUFFER LENGTH LOCN.*
0083* * (P+8) DEF DTRAK (DISC I/O ONLY) TRACK NUMBER LOCN. *
0084* * (P+9) DEF DSECT (DISC I/O ONLY) SECTOR NUMBER LOCN.*
0085* * REQUEST CODES(WHEN USED IN JOB/FILE PROCESSOR ALL *
0086* * REQUEST CODES MUST BE NEGATIVE). *
0087* * 1 READ FROM DEVICE OTHER THAN DISC USER AREA. *
0088* * 2 WRITE ON DEVICE OTHER THAN DISC USER AREA. *
0089* * 3 CONTROL REQUEST(FUNCTION IS IN UPPER 1/2 CONWD)*
0090* * 7 PAUSE FOR PROGRAM SUSPENSION *
0091* * 19 STORE A IN B(IN PROTECTED MEMORY) *
0092* * 20 TURN ON THE LOADER *
0093* * 21 TURN ON THE TIME BASE GENERATOR *
0094* * 22 EXECUTE THE INSTRUCTION IN THE 'A' REGISTER *
0095* * CONTROL REQUEST (TYPE 3,ABOVE)FUNCTIONS ARE IN UPPER*
0096* * 8 BITS, L.U.N. IN LOWER 8 BITS OF 'CONWD' *
0097* * FUNCTION CODE(OCTAL) ACTION *
0098* * 7 SET SIMULATED END OF TAPE STATUS*
0099* * FOR PAPER TAPE INPUT DEVICE *
0100* * 10 GENERATE PAPER TAPE LEADER/TRLR *
0101* * 11 LINE SPACING FOR LIST DEVICE *
0102* * (A PARAMETER FOLLOWS THE CONTROL REQUEST *
0103* * FUNCTION WHEN LINE SPACING IS REQUESTED. *
0104* * IF POSITIVE IT'S THE LINE COUNT, IF NEGA- *
0105* * TIVE IT SKIPS TO TOP OF FORM.) *
0106* * THE CONTROL WORD(ALL REQ.CODE TYPES OTHER THAN 3) *
0107* * STRUCTURE IS AS FOLLOWS: *
0108* * BIT= 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 *
0109* * 0 0 W A K V M (LOGICAL UNIT #) *
0110* * W: 0 " WAIT FOR TRANSFER COMPLETION *
0111* * 1 " NO WAIT FOR COMPLETION *
0112* * K: 0 " INPUT FROM TTY KEYBOARD/READER NOT PRINTED. *
0113* * 1 " INPUT PRINTED AS RECEIVED FROM TTY *
0114* * M: 0 " DATA TRANSFER FORMAT IS IN ASCII. *
0115* * 1 " DATA TRANSFER IS IN BINARY(ALWAYS =1 ON DISC)*
0116* * V: " VARIABLE LENGTH BINARY INPUT(M=1,PAPER TAPE)*
0117* * 0=LENGTH DETERMINED BY BUFFER LENGTH WORD *
0118* * A: 0 " DATA TRANSFER IN REL. BINARY, IF M & V= 1 *
0119* * 1 " DATA TRANSFER IN ABS. BINARY, IF M & V=1 *
0120* * OTHERWISE IGNORED. *
0121* * BITS 9, 10 AND 12 ARE IGNORED. *
0122* *****

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0124* *****
0125* * JOBPR - DISC OPERATING SYSTEM JOB PROCESSOR *
0126* * 1. SCANS CURRENT JOB CONTROL STATEMENT. *
0127* * 2. SETS UP PARAMETER TABLE FOR USE BY *
0128* * THE CONTROL STATEMENT PROCESSORS. *
0129* * 3. PRINTS THE STATEMENT IF INDICATED. *
0130* * 4. JUMPS TO OR CALLS THE PROCESSOR REQ'STD*
0131* *****
0132 00000 076216R JOBPR STB STLEN
0133 00001 006400 CLB
0134 00002 076770R STB EDITF CLEAR EDIT FLAG
0135 00003 076751R STB RBINF CLEAR 'RELOC. BINARY' FLAG
0136 00004 076752R STB ABINF CLEAR ABSOLUTE BIN. FLAG
0137 00005 077306R STB MVALU CLEAR LOW LIMIT FOR SEC. PUNCHIN
0138 00006 077312R STB DOSM CLEAR 'WORK FILE' EDIT FLAG
0139 00007 077256R STB TRFLG
0140 00010 077243R STB INFL
0141 00011 077244R STB ABFL
0142 00012 077242R STB JOBFL
0143 00013 064200 LOB DISCL
0144 00014 006004 INB
0145 00015 076773R STB USDIR SET USER DIRECTORY T/S
0146 00016 060115 LDA SYSBF
0147 00017 040075 ADA B1774
0148 00020 073465R STA JOBTR
0149 00021 063500R LDA LUN3 SET DISC LUN#3 FOR DIRECTORY PRO
0150 00022 073623R STA FLUN
0151 00023 060266 LDA EJOBF
0152 00024 002302 CCE, SZA
0153 00025 026403R JMP RN8J
0154*
0155 00026 001500 JOBCN ERA
0156 00027 030106 IOR CLEX
0157 00030 067210R LDB XCLEX
0158 00031 016430R JSB EXSET TURN OFF EXECUTION CLOCK
0159 00032 017064R JSB SCANR
0160 00033 160123 LDA JBUFF, I GET 1ST CHARACTER
0161 00034 010075 AND B1774
0162 00035 053324R CPA B35K COLON?
0163 00036 006401 CLB, RSS -YES
0164 00037 173170R STA PMTBL, I NO - SET FOR BAD CONTROL REQUEST
0165 00040 163170R LDA PMTBL, I
0166 00041 053041R CPA AJO 'JOB'?
0167 00042 026126R JMP JOB
0168 00043 053227R CPA AEJ 'EJOB'?
0169 00044 026113R JMP EJOB
0170 00045 053170R CPA CHARS+23 'UD'?
0171 00046 002001 RSS -J3
0172 00047 077455R STB DDFLG -NO, CLEAR DISC DUMP FLAG

0174 00050 060111 LDA BATCH
0175 00051 050112 CPA SYSTY INPUT ON TTY?
0176 00052 026056R JMP ++4 YES
0177 00053 060123 LDA JBUFF
0178 00054 066216R LDB STLEN
0179 00055 016744R JSB ERRDG GO PRINT THE STATE.ON TTY

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0180 00056 002400      CLA
181*
0182*      * SET UP PARAMETERS FOR TESTING AND *
0183*      * JUMPS TO DOS PROCESSOR ROUTINES. *
0184*      * PMLOC PNTS AT PMTBL AT THIS TIME.*
0185*
0186 00057 067071R      LDB PROCS      B=ADDRESS OF 1ST PROCESS JUMP
0187 00060 063141R      LDA CHARS
0188 00061 072767R      STA TSAVE      TSAVE=ADDRESS OF 1ST CHAR PAIR
0189 00062 063140R      LDA PROC#
0190 00063 073600R      STA TEMP      TEMP = # OF CHAR. PAIRS TO TEST.
0191 00064 163170R      LDA PMTBL,I    GET CHAR. PAIR FROM CONTRL.STATM
0192 00065 152767R      JOBTS CPA TSAVE,I  IS THIS THE PAIR?
0193 00066 124001      JMP B,I        YES = JUMP TO PROCESSOR
0194 00067 036767R      ISZ TSAVE
0195 00070 006004      INB
0196 00071 037600R      ISZ TEMP      LIST FINISHED?
0197 00072 026065R      JMP JOBTS      NO = GO CHECK NEXT PAIR
0198*
0199*      * ILLEGAL JOB CONTROL STATEMENT *
0200*
0201 00073 062075R      BDCTL LDA **2
0202 00074 026127R      JMP PMISS+1
0203 00075 000076R      DEF **1
0204 00076 041101      ASC 9,BAD CONTROL STATE.
0205*
0206 00107 016001X      PAUSE JSB EXEC      'PAUSE' = GO TO PROGRAM SUSPEND
0207 00110 000112R      DEF **2
0208 00111 000044      DEF .-7
0209 00112 026311R      JMP RNS

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0211* *****
0212* *JOB = 'JOB' STATEMENT PROCESSOR *
0213* * EJOB = PROCESSING DONE AT END OF JOB *
0214* *****
0215 00113 060054 EJOB LDA .+1
0216 00114 067211R LDB XBATC RESET BATCH TO LUN 1
0217 00115 016430R JSB EXSET GO SET INTO BASE PAGE
0218 00116 060051 LDA .-2
0219 00117 066771R LDB XEJOB
0220 00120 016430R JSB EXSET
0221 00121 002400 CLA
0222 00122 073243R STA INFL
0223 00123 073244R STA ABFL
0224 00124 072770R STA EDITF
0225 00125 026135R JMP JOB01
0226 00126 002400 JOB CLA SET JOBFL TO 0 FOR JOB
0227 00127 073243R STA INFL
0228 00130 073244R STA ABFL
0229 00131 073242R STA JOBFL
0230 00132 060266 LDA EJOB
0231 00133 002002 SZA IS END JOB FLAG ON?
0232 00134 026224R JMP JOB03 -YES
0233*
0234* * COMPUTE RUN TIME *
0235*
0236 00135 063241R JOB01 LDA CLC0
0237 00136 016765R JSB OPONF LOCK OUT OP. ATTN.
0238 00137 016001X JSB EXEC EXECUTE CLC 0,C
0239 00140 000142R DEF **2
0240 00141 001232R DEF DM22
0241 00142 016001X JSB EXEC TURN ON TIME BASE GENERATOR
0242 00143 000145R DEF **2
0243 00144 001233R DEF DM21
0244*
0245 00145 002404 CLA,INA SET JOBFL TO 1 FOR ENDJOB
0246 00146 073242R STA JOBFL
0247 00147 160333 LDA TYEQ4,I
0248 00150 001266 RAL,CLE,ERA
0249 00151 064333 LDB TYEQ4
0250 00152 016430R JSB EXSET MAKE SURE TTY AVAIL.
0251 00153 002400 CLA
0252 00154 067223R LDB XXMOD
0253 00155 016430R JSB EXSET MAKE SURE EXEC MOD AREA AVAIL.
0254*
0255 00156 067353R LDB RDSYS READ IN SYSTEM BUFFER SECTOR
0256 00157 017356R JSB SYSB
0257*
0258 00160 063225R LDA XSYLB * GET LABEL SAVED
0259 00161 066170R LDB DFLBL * AT JOB START
0260 00162 017047R JSB WMOVE * TO RESTORE
0261 00163 000003 DEC 3 * DEFAULT USER DISC
0262*
0263* *****
0264* *****
0265 00164 063066R LDA STIME GET START TIME(MIN)
0266 00165 003000 CMA

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0267	00166	040104	ADA CLOCK	A = ELAPSED MINUTES
0268	00167	067067R	LDB STIME+1	GET START TIME(SECS.)
0269	00170	007004	CMB, INB	
0270	00171	044105	ADB CLOCK+1	B = ELAPSED SECONDS + .10S
0271	00172	006021	SSB, RSS	BORROW A MINUTE?
0272	00173	002005	INA, RSS	-NO
0273	00174	047230R	ADB D600	ADD TO SECONDS + TENTHS
0274	00175	077067R	STB STIME+1	SAVE SECONDS +.10S
0275	00176	016525R	JSB CNDEC	CONVERT A TO DECIMAL DIGITS
0276	00177	077007R	STB RNTIM	
0277	00200	073010R	STA RNTIM+1	MINUTE IN BUFFER
0278	00201	063067R	LDA STIME+1	
0279	00202	016677R	JSB CNSEC	CONVERT A TO SECONDS AND TENTHS.
0280	00203	077014R	STB RNTIM+5	
0281	00204	073015R	STA RNTIM+6	RUN TIME COMPLETE
0282*				
0283*			* CONVERT AND STORE EXECUTION TIME *	
0284*				
0285	00205	060106	LDA CLEX	
0286	00206	001665	ELA, CLE, ERA	CLEAR EXECUTION BIT
0287	00207	016525R	JSB CNDEC	CONVERT A TO DECIMAL DIGITS
0288	00210	077024R	STB EXTIM	
0289	00211	073025R	STA EXTIM+1	SET EXECUTION MINUTES
0290	00212	060107	LDA CLEX+1	
0291	00213	002002	SZA	
0292	00214	043230R	ADA D600	
0293	00215	016677R	JSB CNSEC	CONVERT A TO SECONDS AND TENTHS.
0294	00216	077031R	STB EXTIM+5	
0295	00217	073032R	STA EXTIM+6	SET EXECUTION SECONDS+10THS
0296*				
0297*			* MOVE 'JOB NAME' TO OUTPUT BUFFER *	
0298*				
0299	00220	063573R	LDA JNAML	
0300	00221	066774R	LDB ENJP5	
0301	00222	017047R	JSB WMOVE	
0302	00223	000003	DEC 3	
0303*				
0304*			* MOVE 'JOB NAME' TO 'BUFFR' AREA *	
0305*				
0306	00224	067353R	JOB03 LDB RDSYS	
0307	00225	017356R	JSB SYSB	
0308	00226	063374R	LDA BLNKS	SET NAME AREA TO BLANKS
0309	00227	073070R	STA JNAME	
0310	00230	073071R	STA JNAME+1	
0311	00231	073072R	STA JNAME+2	
0312	00232	017625R	JSB PMNXT	
0313	00233	072250R	STA JOB16	SET ORIGIN OF MOVE
0314	00234	002003	SZA, RSS	IS THE JOB NAME PRESENT?
0315	00235	026252R	JMP JOB05	-NO, SKIP MOVING IT
0316	00236	017625R	JSB PMNXT	
0317	00237	002020	SSA	IS IT ALPHA?
0318	00240	026252R	JMP JOB05	-NO
0319*				
0320*			*****	
0321	00241	067573R	LDB JNAML	
0322	00242	005200	RBL	B = DEST. ADDR

0323	00243	040045	ADA	.-6	START FOR CHECK ON CHAR. COUNT
0324	00244	002021	SSA	RSS	MORE THAN 5 CHARS IN JOB NAME?
0325	00245	003400	CCA		YES, SET A TO GIVE 5 CHARS
0326	00246	040061	ADA	.-6	A NOW = NO. OF CHARS IN JOB NAME
0327	00247	017003R	JSB	MOVE	
0328	00250	000000	JOB16	NOP	
0329	00251	002400	CLA		
0330*					
0331	00252	072613R	JOB05	STA NMFLG	GET JOB NAME FLAG
0332	00253	067354R	LDB	WRSYS	
0333	00254	017356R	JSB	SYSB	WRITE SYST. BFR SECTOR
0334	00255	060266	LDA	EJOB	
0335	00256	003026	CMA	SSA, INA, SZA	
0336	00257	026303R	JMP	JOB10	
0337*					
0338*					
0339*					
0340	00260	060103	LDA	TBG	
0341	00261	064062	LDB	.-7	SET FOR 7 WORD BUFFER
0342	00262	002002	SZA		
0343	00263	067574R	LDB	D32	NO
0344	00264	062775R	LDA	PREND	BUFFER ORIGIN 'A'
0345	00265	016651R	JSB	PRLST	LIST ON TTY AND LIST DEV. IF #TTY
0346	00266	063242R	LDA	JOBFL	IF PROCESSING :EJ, RESET LUN'S
0347	00267	002002	SZA		AFTER PRINTING END STATEMENT.
0348	00270	016634R	JSB	STLUN	
0349*					
0350*					
0351*					
0352	00271	063232R	LDA	PMLOC	
0353	00272	017714R	JSB	NXSET	
0354	00273	002404	CLA	INA	
0355	00274	006400	CLB		
0356	00275	017706R	JSB	PURGE	
0357	00276	063760R	LDA	SAVPM	
0358	00277	073232R	STA	PMLOC	
0359*					
0360	00300	060175	LDA	GUDSC	GET DEFAULT USER SUNL
0361	00301	006404	CLB	INB	AND
0362	00302	016162R	JSB	JEXUD	RESET
0363*					
0364	00303	060266	JOB10	LDA EJOB	
0365	00304	002021	SSA	RSS	WAS THIS AN 'EJOB' ENTRY?
0366	00305	026433R	JMP	JOB11	NO -
0367	00306	003004	CMA	INA	
0368	00307	066771R	LDB	XEJOB	
0369	00310	016430R	JSB	EXSET	
0370*					
0371	00311	060262	RNS	LDA SWAP	
0372	00312	002020	SSA		:TY FROM DISCM
0373	00313	026620R	JMP	OFF1	YES.
0374	00314	063036R	RNSB	LDA PRINP	PRINT ENTER ACCEPTED CHAR(0,BELL
0375	00315	064111	LDB	BATCH	
0376	00316	007000	CMB		
0377	00317	054051	CPB	.-2	TTY INPUT BATCH DEVICE?
0378	00320	016744R	JSB	ERRDG	YES, PRINT '0,BELL' FOR INPUT RQ

0379	00321	060111		LOA BATCH	IF BATCH MODE, DON'T READ NEW S
0380	00322	050112		CPA SYSTY	IF THE PREVIOUS JOB HAS BEEN AB0
0381	00323	026357R		JMP RNSK	
0382	00324	063244R		LOA ABFL	ABFL=1 IF RETURN FROM ABORT
0383	00325	002003		SZA, RSS	= 0 IF NORMAL RETURN
0384	00326	026357R		JMP RNSK	
0385	00327	063243R		LDA INFL	IF ABORT FROM :ST OR :ED, DON'T
0386	00330	002003		SZA, RSS	INFL=1 IF FROM :ST OR :ED.
0387	00331	016561R		JSB INPUT	BATCH MODE, ABFL=1, INFL=0. SO INPU
0388*					
0389*			* BATCH ABORT *		
0390*					
0391	00332	160123	RNSI	LOA JBUFF, I	CHECK IF :JO OR :EJ
0392	00333	006400		CLB	
0393	00334	076770R		STB EDITF	
0394	00335	077455R		STB DDFLG	
0395	00336	064123		LDB JBUFF	
0396	00337	006004		INB	
0397	00340	164001		LDB B, I	
0398	00341	016436R		JSB ., RRL	
0399	00342	177750		DEC -24	
0400	00343	010074		AND B377	
0401	00344	053234R		CPA B72	COLON?
0402	00345	002701		CLA, CCE, RSS	
0403	00346	026355R		JMP RNSL	
0404	00347	057041R		CPB AJ0	:JO?
0405	00350	026026R		JMP JOBCN	
0406	00351	057227R		CPB AEJ	:EJ?
0407	00352	026113R		JMP EJOB	
0408	00353	057160R		CPB CHARS+15	:TY?
0409	00354	026026R		JMP JOBCN	
0410	00355	016561R	RNSL	JSB INPUT	INPUT NEXT STATEMENT.
0411	00356	026332R		JMP RNSI	SHUFFLE UNTIL :EJ, OR :JO
0412*					
0413	00357	016561R	RNSK	JSB INPUT	
0414	00360	006003		SZB, RSS	WAS A STATEMENT READ?
0415	00361	026357R		JMP RNSK	NO - GO BACK AND RE-READ
0416	00362	002400		CLA	
0417	00363	073243R		STA INFL	
0418	00364	073244R		STA ABFL	
0419	00365	060111		LDA BATCH	IF IN BATCH MODE, EDITF IS IGNORE
0420	00366	050112		CPA SYSTY	
0421	00367	002001		RSS	
0422	00370	026374R		JMP RNSH	
0423	00371	062770R		LOA EDITF	
0424	00372	002002		SZA	EDIT FLAG ON?
0425	00373	026552R		JMP EDITA	YES - GO BACK TO EDIT ROUTINE
0426	00374	054054	RNSH	CPB .+1	STLEN = 1 WORD?
0427	00375	026073R		JMP BDCTL	-TOO SHORT - REJECT!
0428	00376	060266		LDA EJOB	
0429	00377	053374R		CPA BLNKS	DID IT RE-READ "DATE"?
0430	00400	026706R		JMP DATE	YES
0431	00401	002003		SZA, RSS	IS END JOB FLAG ON?
0432	00402	026000R		JMP JOBPR	NO - SKIP JOB TEST
0433	00403	160123	RNSJ	LOA JBUFF, I	
0434	00404	064123		LDB JBUFF	

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0435 00405 006004      INB
0436 00406 164001      LDB B,I      GET 3RD AND 4TH CHARS
0437* *****
0438 00407 016436R     JSB .,RRL
0439 00410 177750      DEC #24
0440* *****
0441 00411 010074      AND B377      ISOLATE 1ST CHAR
0442 00412 053234R     CPA B72      IS IT A COLON?
0443 00413 002701      CLA,CCE,RSS    -YES
0444 00414 026427R     JMP JOBB      NO - GO TO TTY INPUT CHECK
0445 00415 057041R     CPB AJO      'JOB'?
0446 00416 002001      RSS          -YES
0447 00417 057157R     CPB CHARS+14  'BATCH'?
0448 00420 002001      RSS          -YES
0449 00421 057160R     CPB CHARS+15  'TYPE'?
0450 00422 026026R     JMP JOBCN     YES
0451 00423 057161R     CPB CHARS+16  'TRACKS'?
0452 00424 026763R     JMP TRACK     YES
0453 00425 057203R     CPB AOF
0454 00426 026614R     JMP OFF
0455 00427 060111      JOBB LDA BATCH
0456 00430 050112      CPA SYSTY      INPUT ON TTY?
0457 00431 026711R     JMP IGNOR     YES - PRINT '*IGNORE'
0458 00432 026311R     JMP RNS      NO
0459 00433 067353R     JOB11 LDB RDSYS  READ IN SYSTEM BUFFER SECTOR
0460 00434 017356R     JSB SYSB
0461 00435 073455R     STA DDFLG
0462 00436 072254R     STA JSFLG
0463 00437 073256R     STA TRFLG
0464 00440 066771R     LDB XEJOB
0465 00441 016430R     JSB EXSET
0466 00442 067212R     LDB XJBIN      SETUP TO CLEAR PARAMETERS
0467 00443 016430R     JSB EXSET      JBINS
0468 00444 016430R     JSB EXSET      JBINC
0469 00445 067213R     LDB XJFIL
0470 00446 016430R     JSB EXSET      JFILS
0471 00447 016430R     JSB EXSET      JFILC
0472 00450 016430R     JSB EXSET      RONBF+0
0473 00451 044057      ADB .+4
0474 00452 016430R     JSB EXSET      RONBF+5
0475 00453 067214R     LDB XCXMx
0476 00454 016430R     JSB EXSET      CXMX
0477 00455 067215R     LDB XDUMP
0478 00456 016430R     JSB EXSET      DUMPS
0479 00457 067216R     LDB XRTRK
0480 00460 016430R     JSB EXSET      RTRK
0481 00461 067217R     LDB XNFLA
0482 00462 016430R     JSB EXSET      NFLAG
0483 00463 067222R     LDB XEFMP
0484 00464 016430R     JSB EXSET
0485 00465 064331      LDB SSFLG
0486 00466 056371R     CPB ANO
0487 00467 062371R     LDA ANO
0488 00470 067221R     LDB XSFLG
0489 00471 016430R     JSB EXSET
0490*

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1491 00472 016634R      JSB STLUN      RESET 1ST 9 LUN'S
1492*
1493 00473 062613R      LDA NMFLG      GET JOB NAME FLAG
1494 00474 002021        SSA,RSS        IS IT ALPHA?
1495 00475 026501R      JMP JOB20      -YES
1496 00476 064061        LDB ,+6
1497 00477 062603R      LDA NMIGN
1498 00500 016744R      JSB ERRDG
1499*
1500*          * INITIALIZE EXEC TIMER AND START TIME *
1501*
1502*
1503 00501 060175      JOB20 LDA GUDSC
1504 00502 006404      CLB,INB
1505 00503 016162R      JSB JEXUD      SET CURRENT USER DISC = DEFAULT
1506*
1507 00504 003400      CCA
1508 00505 040001      ADA B
1509 00506 006404      CLB,INB
1510 00507 017415R      JSB RDISC      GET USER DISC LABEL SECTOR
1511 00510 011375R      DEF INBUF
1512*
1513 00511 063224R      LDA XDLBL      *
1514 00512 067225R      LDB XSYLB
1515 00513 017047R      JSB WMOVE      * SAVE LABEL ON
1516 00514 000003      DEC 3
1517*
1518 00515 063375R      LDA INBUF
1519 00516 066204R      LDB UPAST
1520 00517 053226R      CPA ASCLB
1521 00520 002001      RSS
1522 00521 077122R      STB LBLSV
1523*
1524 00522 060104      LDA CLOCK
1525 00523 073066R      STA STIME
1526 00524 060105      LDA CLOCK+1
1527 00525 073067R      STA STIME+1
1528 00526 067354R      LDB WRSYS      RESTORE SYS BUF SECTOR
1529 00527 017356R      JSB SYSB
1530*
1531 00530 001500      ERA
1532 00531 067210R      LDB XCLEX
1533 00532 016430R      JSB EXSET      CLEX (MINUTES)
1534 00533 063231R      LDA DM000
1535 00534 016430R      JSB EXSET      CLEX+1 (TENTHS OF SECONDS)
1536*
1537*          * SET UP TO PRINT JOB STATEMENT *
1538*
1539 00535 063573R      LDA JNAML      THIS MOVES BOTH JOB AND DATE.
1540 00536 067070R      LDB JOBUG
1541 00537 017047R      JSB WMOVE      MOVE THEN
1542 00540 000010      DEC 8          FOR AN 8 WORD MOVE
1543 00541 063066R      LDA STIME
1544 00542 016525R      JSB CNDEC      CONVERT A TO DECIMAL DIGITS
1545 00543 077056R      STB JOBUF+14
1546 00544 073057R      STA JOBUF+15      'MINUTES' STORED

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1547 00545 063067R LDA STIME+1
1548 00546 043230R ADA D600
1549 00547 016677R JSB CNSEC CONVERT A TO SECONDS AND TENTHS.
1550 00550 077063R STB JOBUF+19
1551 00551 073064R STA JOBUF+20 'SECS. + 10THS' STORED
1552 00552 064065 LDB .+10
1553 00553 060103 LDA TBG
1554 00554 002002 SZA TBG?
1555 00555 067545R LDB D23 YES
1556 00556 063040R LDA JOBUF GET START OF JOB OUTPUT BUFFER
1557 00557 016651R JSB PRLST LIST ON TTY AND LIST DEV. IF #TTY
1558 00560 026311R JMP RNS GO READ NEXT STATEMENT
1559*
1560* * SUBROUTINE TO INPUT NEXT STATEMENT *
1561 00561 000000 INPUT NOP
1562 00562 060111 LDA BATCH
1563 00563 033235R IOR B400
1564 00564 072772R STA RNLUN
1565 00565 006404 CLB, INB SET B = +1 FOR INPUT
1566 00566 017506R JSB LUCHK CHECK LUN STATUS
1567 00567 060261 LDA OPFLG
1568 00570 002002 SZA
1569 00571 026567R JMP *-2
1570 00572 016001X JSB EXEC INPUT NEXT STAT.
1571 00573 000600R DEF **5
1572 00574 000052 DEF .-1
1573 00575 000772R DEF RNLUN
1574 00576 100123 DEF J8UFF, I JOB BUFFER ORIGIN
1575 00577 006041R DEF D36 36 WORDS (=72 CHARACTERS)
1576 00600 076221R STB SAVL SAVE STAT. LENGTH
1577 00601 076216R STB STLEN I.E. WORD COUNT.
1578 00602 126561R JMP INPUT, I
1579*
1580 00603 000604R NMIGN DEF **1
1581 00604 047101 ASC 6, NAME*IGNORED
1582 00612 000606R IGN DEF **4 LOC OF '*IGNORED'
1583 00613 000000 NMFLG NOP
1584*
1585 00614 060111 OFF LDA BATCH ***** KEYBOARD MODE ONLY *
1586 00615 050112 CPA SYSTY
1587 00616 002001 RSS
1588 00617 026711R JMP IGNOR
1589 00620 002400 OFF1 CLA
1590 00621 073455R STA DDFLG CLEAR DISC DUMP FLAG
1591 00622 072770R STA EDITF CLEAR EDIT FLAG
1592 00623 067215R LDB XDUMP
1593 00624 016430R JSB EXSET
1594 00625 002404 CLA, INA
1595 00626 067211R LDB XBATC
1596 00627 016430R JSB EXSET
1597 00630 066633R LDB XSWAP CLEAR BIT 15 OF SWAP
1598 00631 016430R JSB EXSET
1599 00632 026314R JMP RNSB
1600*
1601 00633 000262 XSWAP DEF SWAP
1602*

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0603*
0604*
0605*
0001 00634 000000 STLUN NOP
0002 00635 060042 LDA ,+9
0003 00636 073600R STA TEMP SET TEMP FOR 9 PASSES
0004 00637 062650R LDA SLUNL
0005 00640 072751R STA EOTST SET LOCN OF SAVED LUN ENTRIES
0006 00641 064121 LDB LUTAB B = 1ST LOCN OF LUN TABLE
0007 00642 162751R LDA EOTST,I GET AN ENTRY
0008 00643 016430R JSB EXSET STORE IT
0009 00644 036751R ISZ EOTST SET FOR NEXT ENTRY
0010 00645 037600R ISZ TEMP DONE?
0011 00646 026642R JMP **4 NO, GO STORE NEXT ONE
0012 00647 126634R JMP STLUN,I YES, RETURN TO PROGRAM
0013*
0014 00650 007111R SLUNL DEF LUSAV
0015*
0016*
0017*
0018*
0019*
0020 00651 000000 PRLST NOP
0021 00652 072274R STA LSTBF SAVE (LIST) PARAMETERS
0022 00653 077760R STB LSTBL
0023 00654 016744R JSB ERRDG PRINT ON TTY
0024 00655 007400 CCB B**1 MEANS OUTPUT DEVICE
0025 00656 060061 LDA ,+6
0026 00657 072213R STA LSTLN SET LSTLN = LUN 6 FOR LSTIO SR
0027 00660 073647R STA SAVEA
0028 00661 017506R JSB LUCKK CHECK FOR VALID LUN 6.
0029 00662 017634R JSB NULCK LUN NULL?
0030 00663 126651R JMP PRLST,I YES, RETURN IMMEDIATELY
0031 00664 064121 LDB LUTAB GET ADDRESS OF LUN TABLE
0032 00665 044060 ADB ,+6 ADDRESS OF LUN 6 (LIST DEVICE)
0033 00666 164001 LDB B,I B=EQT FOR LUN 6
0034 00667 154121 CPB LUTAB,I IS IT THE SAME AS THE TTY?
0035 00670 126651R JMP PRLST,I YES - RETURN
0036 00671 062213R LDA LSTLN
0037 00672 017515R JSB PGEJ
0038 00673 062274R LDA LSTBF
0039 00674 067760R LDB LSTBL
0040 00675 016256R JSB LSTIO PRINT ON SYS, LIST DEVICE
0041 00676 126651R JMP PRLST,I RETURN
0042*
0043*
0044*
0045*
0046*
0047*
0048 00677 000000 CNSEC NOP
0049 00700 016525R JSB CNDEC CONVERT A TO DECIMAL DIGITS
0050 00701 047237R ADB BM1K CONVERT 0 TO . (B=1000)
0051*
0052 00702 016436R JSB .,RRL
0053 00703 177770 DEC -8

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0054* *****
0055 00704 001727      ALF,ALF
0056 00705 126677R      JMP CNSEC,I  RETURN
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0058*
0059*
0060*
0061 00706 060105 DATE LDA CLOCK+1
0062 00707 002003 SZA,RSS IS THIS A FRESH START?
0063 00710 027375R JMP DATE1 YES
0064 00711 064057 IGNOR LDB ,+4 NO
0065 00712 062612R LDA IGN PRINT 'IGNORED' ON TTY
0066 00713 016744R JSB ERRDG
0067 00714 026311R JMP RNS
0068*
0069*
0070*
0071*
0072 00715 060122 PBATC LDA LUT# GET NO. OF LUNS
0073 00716 017543R JSB TBSET CONVERT AND CHECK THE LUN PARAM
0074 00717 026126R JMP PMISS ERROR, LUN IS MISSING
0075 00720 063567R LDA EQTNM GET THE LUN NO.
0076 00721 073647R STA SAVEA
0077 00722 017634R JSB NULCK ***** CAN'T SET NUL LUN TO BE
0078 00723 027562R JMP LUCH3 BATCH DEVICE *****
0079 00724 063567R LDA EQTNM
0080 00725 064054 LDB ,+1 INPUT
0081 00726 017506R JSB LUCHK
0082 00727 063567R LDA EQTNM
0083 00730 017626R JSB DSCLU CHECK IF DISC
0084 00731 016751R JSB EOTST GO SET EOT STATUS IN CASE NEEDED
0085 00732 063567R LDA EQTNM RESTORE LUN TO A
0086 00733 064121 LDB LUTAB (A*VALUE) PICK LUN TABLE FWA
0087 00734 044052 ADB , -1
0088 00735 044000 ADB A B POINTS AT ENTRY IN LUN TABLE
0089 00736 164001 LDB B,I
0090 00737 006002 SZB IS AN EQT ENTRY THERE FOR IT?
0091 00740 026745R JMP PBAT2 YES - CONTINUE
0092*
0093 00741 062743R PILLG LDA **2
0094 00742 026127R JMP PMISS+1 GO PRINT 'ILLEG PARAM' DIAG.
0095 00743 004147R DEF SSIMP+5
0096*
0097 00744 060054 TYPE LDA ,+1 ***PROCESS 'TYPE' CONTROL WORD**
0098 00745 067211R PBAT2 LDB XBATC
0099 00746 016430R JSB EXSET SET BATCH = LUN IN PARAMETER
0100 00747 026311R JMP RNS NO - GO READ NEXT CONTROL STATE.
0101 00750 177756 N18 DEC -18
0102*
0103*
0104*
0105*
0106*
0107 00751 000000 EOTST NOP
0108 00752 002003 SZA,RSS IS LUN = 0?
0109 00753 126751R JMP EOTST,I YES, RETURN
0110 00754 033236R IOR B700 SET UP CONTROL WORD
0111 00755 073600R STA TEMP
0112 00756 016001X JSB EXEC
0113 00757 000762R DEF **3

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0114	00760	000050	DEF .-3	SET SIM EOT STATUS
0115	00761	003600R	DEF TEMP	CONWD
0116	00762	126751R	JMP EOTST,1	EXIT FROM SUBROUTINE

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0118* *****
0119* * PRINT 'TRACK' STATUS AS PER REQUEST *
0120* * AND SET SPECIFIED TRACKS TO 'BAD'. *
0121* *****
0122 00763 067353R TRACK LDB RDSYS
0123 00764 017366R JSB LBLIO READ USER LABEL SECTOR
0124 00765 067064R LDB BUFFER+65 GET BAD TRACK COUNT
0125 00766 027533R JMP UP,1 GO PROCESS IN SEX09

0127 00767 000000 TSAVE BSS 1
0128 00770 000000 EDITF NOP WHEN EDITING EDITF NON ZERO
0129 00771 000266 XEJOB DEF EJOBF
0130 00772 000000 RNLUN NOP SYSTEM INPUT CONTROL WORD
0131 00773 000000 USDIR NOP T/S OF USER DIRECTORY
0132*
0133 00774 001002R ENJP5 DEF PREND+5
0134 00775 000776R PREND DEF ++1
0135 00776 042516 ASC 18,END JOB XXXXX RUN=XXXX MIN. XX.X SEC
0136 01020 027040 ASC 14,. EXEC=XXXX MIN. XX.X SEC.
0137 01007 RNTIM EQU PREND+10
0138 01024 EXTIM EQU PREND+23
0139 01036 001037R PRINP DEF ++1
0140 01037 040007 OCT 40007 * FOLLOWED BY BELL
0141 01040 001041R JOBUF DEF ++1 START OF 'JOB' STATEMENT OUTPUT
0142 01041 045117 AJO ASC 18,JOB XXXXX XXXXXXXXXXXX TIME=XXXX MIN.
0143 01063 054130 ASC 5,XX,X SECS.
0144 01070 001043R JOBUG DEF JOBUF+3 START OF JOB/DATE DEST. BUFFER
0145 01071 101072R PROCS DEF ++1,1 ***ADDRESSES OF DOS PROCESSORS
0146 01072 000311R DEF RNS COMMENT
0147 01073 004506R DEF ABORT
0148 01074 000706R DEF DATE DATE
0149 01075 001526R DEF EQ EQ
0150 01076 001526R DEF UP DN
0151 01077 001526R DEF UP UP
0152 01100 001526R DEF UP
0153 01101 000107R DEF PAUSE
0154 01102 001760R DEF JFILE JFILE
0155 01103 002452R DEF PROG PROGRAM
0156 01104 001632R DEF PDUMP POST MORTE DUMP
0157 01105 001635R DEF ADUMP ABORT DUMP
0158 01106 002330R DEF RUN RUN
0159 01107 000715R DEF PBATC BATCH
0160 01110 000744R DEF TYPE TYPE
0161 01111 000763R DEF TRACK TRACKS
0162 01112 004055R DEF STORE STORE
0163 01113 005405R DEF LIST LIST
0164 01114 006337R DEF DUMP DUMP
0165 01115 004005R DEF DELET DELETE
0166 01116 010223R DEF EDIT
0167 01117 006754R DEF DDUMP DISC TO DISC DUMP
0168 01120 002010R DEF UDISC USER DISC ASSIGN
0169 01121 002003R DEF INDISC INIT, USER DISC
0170 01122 001245R DEF CLEAR
0171 01123 001270R DEF REWIN
0172 01124 001426R DEF TOF
0173 01125 001304R DEF RENAM

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0174 01126 001437R      DEF EA
0175 01127 001441R      DEF EB
0176 01130 002452R      DEF PROG      ;REMOTE
0177* * SPECIAL DOS ADDRESSES *
0178 01131 007650R      DEF SOSA
0179 01132 007650R      DEF SOSA
0180 01133 000614R      DEF OFF
0181 01134 002213R      DEF SSRCH
0182 01135 000711R      DEF IGNOR
0183 01136 006725R      DEF MTEOF
0184 01137 001526R      DEF UP
0185 01140 177732  PROC# ABS ==+PROCS+1      COUNT FOR TESTING CHARS.
0186 01141 001142R  CHARS DEF ++1      **CHARACTER PAIRS USED FOR PROGRMS
0187 01142 041517      ASC 12,COABDAEQDNUPLUPAJFPRPDAD
0188 01156 051125      ASC 12,RUBATYTRSTYLIDUPUEDDDUDIN
0189 01172 041514      ASC 7,CLRWTORNEAEBRE
0190* * SPECIAL DOS CHARACTER PAIRS *
0191 01201 051517  ASO  ASC 2,SOSA
0192 01203 047506  AOF  ASC 1,OF
0193 01204 051523  ASS  ASC 1,SS
0194 01205 043517      ASC 1,GO
0195 01206 042506      ASC 1,EF
0196 01207 053510      OCT 53510
0197*
0198 01210 000106  XCLEX DEF CLEX
0199 01211 000111  XBATC DEF BATCH
0200 01212 000101  XJBIN DEF JBINS
0201 01213 000124  XJFIL DEF JFILS
0202 01214 000110  XCXMX DEF CXMX
0203 01215 000113  XDUMP DEF DUMPS
0204 01216 000267  XRTRK DEF RTRK
0205 01217 000236  XNFLA DEF NFLAG
0206 00073  XJFSC EQU B177      (DEF JFL8C)
0207 01220 000161  XCUSC DEF CUDSC
0208 01221 000331  XSFLG DEF SSFLG
0209 01222 000323  XEFMP DEF EFMP
0210 01223 000245  XXMOD DEF EXMOD
0211 01224 011400R  XDLBL DEF INBUF+3
0212 01225 007122R  XSYLB DEF LBL8V
0213 01226 046102  ASCLB ASC 1,LB
0214 01227 042512  AEJ  ASC 1,EJ      EJ08
0215 01230 001130  D600 DEC 600
0216 01231 176650  DM600 DEC =600
0217 01232 177752  DM22 DEC =22
0218 01233 177753  DM21 DEC =21
0219 01234 000072  B72  OCT 72
0220 01235 000400  B400 OCT 400
0221 01236 000700  B700 OCT 700      700 OCTAL
0222 01237 177000  BM1K OCT =1000
0223 01240 001106  B1106 OCT 1106      CONTROL WORD FOR LINE SPACE LUN6
0224 01241 107700  CLC0 CLC 0,C
0225 01242 000000  JOBFL NOP
0226 01243 000000  INFL  NOP
0227 01244 000000  ABFL  NOP
0228*
0229* *****

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0230*      *      PROCESS :CLEAR (,LUN) DIRECTIVE      *
0231*      *****
0232*
0233 01245 016515R CLEAR JSB ASCDC
0234 01246 027263R      JMP CBIN      NO LUN. CLEAR JBIN FLAG.
0235 01247 017626R      JSB DSCLU     CHECK FOR LU 2 OR 3
0236 01250 073262R      STA CW        NO, SAVE LOGICAL UNIT
0237 01251 006400      CLB           B=0 FOR LUCHK
0238 01252 017506R      JSB LUCHK     CHECK FOR VALID LU
0239 01253 063262R      LDA CW        YES, RESTORE LOGICAL UNIT
0240 01254 073262R CL.1 STA CW
0241 01255 016001X      JSB EXEC
0242 01256 001261R      DEF **3
0243 01257 000050      DEF .-3      REQUEST CODE=3, I/O CONTROL
0244 01260 001262R      DEF CW        CONTROL CARD. FUNCTION CODE = 0
0245 01261 026311R      JMP RNS
0246 01262 000000      CW      NOP
0247 01263 002400      CBIN     CLA
0248 01264 067212R      LDB XJBIN
0249 01265 016430R      JSB EXSET
0250 01266 016430R      JSB EXSET
0251 01267 026311R      JMP RNS
0252*
0253*      *****
0254*      *      PROCESS :RWIND (,LUN) DIRECTIVE      *
0255*      *****
0256*
0257 01270 016515R REWIN JSB ASCDC
0258 01271 060063      LDA .+8      DEFAULT IS 8
0259 01272 064047      LDB .-4
0260 01273 044000      ADB A        CAN'T REWIND LUN 1,2, OR 3.
0261 01274 006020      SSB
0262 01275 027562R      JMP LUCH3
0263 01276 073262R      STA CW      SAVE LU
0264 01277 006400      CLB         B=0 FOR LUCHK
0265 01300 017506R      JSB LUCHK   CHECK FOR VALID LU
0266 01301 063262R      LDA CW      RESTORE LU
0267 01302 043235R      ADA B400    CONFIGURE REWIND REQUEST
0268 01303 027254R      JMP CL.1
0269*
0270*      *****
0271*      *      PROCESS :RNAME,OLDNAME,NEWNAME(,NEWTYPE) DIRECTIVE *
0272*      *      IF NEWTYPE PARAM. IS SPECIFIED, IT HAS TO *
0273*      *      BE IN THE RANGE 0 = 12, AND COMPATABLE WITH THE *
0274*      *      OLD FILE TYPE. (I.E. REMAIN IN THE RANGE 0-5,OR 6-12*
0275*      *****
0276*
0277 01304 017651R RENAM JSB USERD      SEARCH OLD FILENAME
0278 01305 026126R      JMP PMISS
0279 01306 002103      CLE,SZA,RSS
0280 01307 026275R      JMP RUN2      FILENAME UNDEFINED
0281 01310 073256R      STA TEMP1     SAVE MLOCN = MEMORY LOC OF ENTRY
0282 01311 067566R      LDB CURTS    SAVE T/S CONTAINING ENTRY
0283 01312 077257R      STB TEMP2
0284 01313 060161      LDA CUDSC
0285 01314 064073      LDB XJFSC      SAVE CUDSC FOR READING BACK 18

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0286 01315 016430R JSB EXSET
0287 01316 017651R JSB USERD
0288 01317 026126R JMP PMISS
0289 01320 002003 SZA,RSS
0290 01321 027331R JMP RN2
0291 01322 053256R CPA TEMP1
0292 01323 002001 RSS
0293 01324 026073R JMP NMDUP
0294 01325 067566R LDB CURT3
0295 01326 057257R CPB TEMP2
0296 01327 002001 RSS
0297 01330 026073R JMP NMDUP
0298 01331 016515R RN2 JSB ASCDC
0299 01332 003400 CCA
0300 01333 073425R STA NUTYP
0301 01334 003004 CMA,INA
0302 01335 043422R ADA D12
0303 01336 002020 SSA
0304 01337 026741R JMP PILLG
0305 01340 063257R LDA TEMP2
0306 01341 010074 AND B377
0307 01342 002003 SZA,RSS
0308 01343 027416R JMP RN4
0309 01344 063257R LDA TEMP2
0310 01345 040052 RN3 ADA .-1
0311 01346 073257R STA TEMP2
0312 01347 067507R LDB N3
0313 01350 077456R STB RWLUN
0314 01351 006404 CLB,INB
0315 01352 017415R JSB RDISC
0316 01353 010346R DEF DICBF
0317 01354 063510R LDA XNMBU
0318 01355 001200 RAL
0319 01356 073363R STA ORIGB
0320 01357 060060 LDA .+5
0321 01360 067256R LDB TEMP1
0322 01361 005200 RBL
0323 01362 017003R JSB MOVE
0324 01363 001363R ORIGB DEF *
0325 01364 063425R LDA NUTYP
0326 01365 002020 SSA
0327 01366 027407R JMP RN1
0328 01367 040045 ADA .-6
0329 01370 013424R AND SIGN
0330 01371 073647R STA SAVEA
0331 01372 067256R LDB TEMP1
0332 01373 044055 ADB .+2
0333 01374 160001 LDA B,I
0334 01375 010071 AND B37
0335 01376 040045 ADA .-6
0336 01377 013424R AND SIGN
0337 01400 053647R CPA SAVEA
0338 01401 002001 RSS
0339 01402 026741R JMP PILLG
0340 01403 160001 LDA B,I
0341 01404 013423R AND MSKT

```

SEARCH 2ND CH

SAME NAME IN DIRECTORY?

NO. OK.

YES. SEE IF SAME AS 1ST FILENAME
BY COMPARING MEM LOC OF DIR. ENTR
AND T/S CONTAINING THE ENTRY OF
THE 1ST FILENAME

TYPE PARM PRESENT?

SET NUTYP < 0 IF NO TYPE CHANGE

CHECK IF LEGAL TYPE

NUTYP > 12?

YES = TOO BIG

A = T/S CONTAINING 1ST FILENAME
CHECK IF ON TRACK BOUNDARY

MINUS 1 SECTOR

SET LUN TO -3

B=1 SECTOR TO READ.

READ DIRECTORY SECTOR INTO DICB
GET BUF ORIGIN (CHAR ADDR)

SET BUF ORIGIN FOR MOVE

MOVE 5 CHAR (NEW FILE NAME) INTO
MEM LOC OF ENTRY
B = DEST. ADDR

NMBUF CHAR ADDR

NEED TO CHANGE TYPE?

NO IF < 0

NO

< 0 IF NUTYP < 6

ONLY NEED SIGN BIT

GET STARTING LOC OF ENTRY

POINT TO 3RD WORD

GET 3RD WORD

GET OLD TYPE ONLY

< 0 IF OLD TYPE < 0

ONLY NEED SIGN BIT.

SAME TYPE CATEGORY AS NUTYP?

YES. GO AHEAD TO CHANGE.

NO. ILLEGAL.

GET BACK 3RD WORD IN DIR.ENTRY
MASK OUT TYPE

```

0342 01405 033425R      IOR NUTYP      SET NEW TYPE
0343 01406 170001      STA B,I        STORE IT BACK
0344 01407 063257R RN1 LDA TEMP2      SET PARAM TO WRITE BACK ENTRY
0345 01410 067507R      LDB N3        SET LUN TO -3
0346 01411 077456R      STB RWLUN
0347 01412 006404      CLB,INB
0348 01413 017425R      JSB WDISC
0349 01414 010346R      DEF DICBF
0350 01415 026311R      JMP RNS
0351*
0352 01416 063257R RN4 LDA TEMP2
0353 01417 042054R      ADA MITRK      MINUS 1 TRACK
0354 01420 040116      ADA SECTR      COMBINE LAST SECTOR #
0355 01421 027345R      JMP RN3
0356 01422 000014 D12 DEC 12
0357 01423 177740 MSKT OCT 177740
0358 01424 100000 SIGN OCT 100000
0359 01425 000000 NUTYP NOP
0360*
0361* *****
0362* * :TOF (,LUN) DIRECTIVE *
0363* *****
0364*
0365 01426 016515R TOF JSB ASCDC      GET LUN
0366 01427 060061      LDA .+6        DEFAULT IS 6.
0367 01430 017626R      JSB DSCLU
0368 01431 073515R      STA PGEJ      SAVE LU
0369 01432 006400      CLB            B=0 FOR LUCHK
0370 01433 017506R      JSB LUCHK     CHECK FOR VALID LU
0371 01434 063515R      LDA PGEJ      RESTORE LU
0372 01435 017515R      JSB PGEJ      PAGE EJECT.
0373 01436 026311R      JMP RNS
0374*
0375* *****
0376* * EXECUTE USER EXEC MODULES *
0377* *****A
0378*
0379 01437 063512R EA LDA XD27      REQ CODE = 27
0380 01440 002001      RSS
0381 01441 063513R EB LDA XD28      REQ CODE = 28 FOR EB
0382 01442 073476R      STA REQC
0383*
0384* SET UP PARAMETERS
0385 01443 067511R      LDB XTMP1     STARTING ADDR FOR PARAM
0386 01444 077306R      STB MVALU     SAVE FOR STORING PARAM LATER.
0387 01445 002400      CLA            INIT. PARAM COUNTER
0388 01446 073570R      STA EQCNT
0389* ADJUST DEF'S (MAY HAVE BEEN WIPE OUT BY PREVIOUS :EA,:EB)
0390 01447 060046      LDA .-5
0391 01450 073600R      STA TEMP      SET COUNTER FOR MAX OF 5 PARAM.
0392 01451 063514R      LDA XEAEB    GET LOC FOR 1ST DEF
0393 01452 067511R      LDB XTMP1    GET LOC FOR 1ST PARAM
0394 01453 174000 EAE83 STB A,I      SET IT.
0395 01454 002004      INA
0396 01455 006004      INB
0397 01456 037600R      ISZ TEMP      ALL FIVE SET?

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```

0398 01457 027453R      JMP EAEB3      NO. NEXT ONE
0399 01460 016515R EAEB1 JSB ASCDC      ANY PARAMETERS?
0400 01461 027467R      JMP EAEB2      NO.
0401 01462 173306R      STA MVALU,I    STORE PARAM.
0402 01463 037570R      ISZ EQCNT      BUMP PARAM COUNTER
0403 01464 037306R      ISZ MVALU      BUMP PARAM POINTER.
0404 01465 037232R      ISZ PMLOC      BUMP PMTBL POINTER
0405 01466 027460R      JMP EAEB1      GET NEXT ONE
0406*
0407* ADJUST RETURN ADDRESS FOR VARIABLE PARAM EXEC CALL
0408*
0409*
0410 01467 063514R EAEB2 LDA XEAEB
0411 01470 043570R      ADA EQCNT      ADD PARAM CNT TO RET.ADDR.
0412 01471 073475R      STA REQC-1
0413 01472 067504R      LDB JMP        SET INSTRUCTION AT RITE RETURN
0414 01473 174000      STB A,I        POINT.
0415*
0416 01474 016001X      JSB EXEC
0417 01475 001477R      DEF ++2      TEMPORARY RETURN POINT.
0418 01476 001476R REQC DEF *
0419 01477 011256R EAEB4 DEF TEMP1
0420 01500 011257R      DEF TEMP2
0421 01501 011260R      DEF TEMP3
0422 01502 011261R      DEF TEMP4
0423 01503 011262R      DEF TEMP5
0424 01504 026311R JMP JMP RNS
0425*
0426 01505 177745 D27 DEC -27
0427 01506 177744 D28 DEC -28
0428 01507 000050 N3 DEF .-3
0429 01510 003570R XNMBU DEF NMBUF
0430 01511 011256R XTMP1 DEF TEMP1
0431 01512 001505R XD27 DEF D27
0432 01513 001506R XD28 DEF D28
0433 01514 001477R XEAEB DEF EAEB4
0434*
0435*
0436* *****
* EJECT PAGE ON STANDRD LIST UNIT *
0437* *****
0438*
0439 01515 000000 PGEJ NOP
0440 01516 042745R      ADA B1100    A = LUN. FOR LIST DEVICE
0441 01517 073262R      STA CW
0442 01520 016001X      JSB EXEC
0443 01521 001525R      DEF ++4
0444 01522 000050      DEF .-3
0445 01523 001262R      DEF CW
0446 01524 000051      DEF .-2
0447 01525 127515R      JMP PGEJ,1

```

```

0449*          *****
0450*          * PROCESS 'EQ','LU','DN' AND 'UP' *
0451*          *****
0452*
0453*
0454*
0455  01526 016765R UP      JSB OPONF      LOCK OUT OP. ATTN.
0456  01527 062216R      LDA STLEN
0457  01530 067542R      LDB XCHAR
0458  01531 016430R      JSB EXSET
0459  01532 066216R      LDB STLEN
0460  01533 016001X UP.1  JSB EXEC      SPECIAL STATUS
0461  01534 001537R      DEF **3      EXEC CALL TO
0462  01535 001575R      DEF D13      HANDLE EQ,LU,UP,DN
0463  01536 000052      DEF .-1      IN EXEC MODULES
0464  01537 002400      CLA
0465  01540 016765R      JSB OPONF      ENABLE OP. ATTN.
0466  01541 026311R      JMP RNS
0467*
0468  01542 000332  XCHAR DEF CHARC
0469*          *****
0470*          * TBSET = SET UP AND CHECK LUN OR EQT VALUE *
0471*          *****
0472  01543 000000  TBSET NOP
0473  01544 003004      CMA,INA
0474  01545 073570R      STA EQCNT      SET UP NO. OF TABLE ENTRIES(CNT)
0475  01546 002404      CLA,INA
0476  01547 073567R      STA EQTNM      SET ENTRY VALUE = 1
0477  01550 016515R      JSB ASCDC
0478  01551 127543R      JMP TBSET,I    TAKE L+1(VAL. MISSING) EXIT
0479  01552 037543R      ISZ TBSET
0480  01553 073567R      STA EQTNM      SET ENTRY VALUE FROM STATE.
0481  01554 002003      SZL,RSS
0482  01555 026741R      JMP PILLG      ERROR = VALUE = 0
0483  01556 043570R      ADA EQCNT
0484  01557 002003      SZL,RSS      TEST FOR VALUE IN RANGE.
0485  01560 027563R      JMP **3
0486  01561 002021      SSA,RSS
0487  01562 026741R      JMP PILLG
0488  01563 003400      CCA
0489  01564 073570R      STA EQCNT      SET COUNTER FOR 1 VALUE.
0490  01565 127543R      JMP TBSET,I
0491*
0492  01566 000000  EQLST NOP
0493  01567 000000  EQTNM NOP
0494  01570 000000  EQCNT NOP
0495  01571 000000  EQPNT NOP
0496  01572 000126  RONLC DEF RONBF
0497  01573 007070R  JNAML DEF JNAME
0498  01526      EQ      EQU UP
0499  01574 000040  B40      OCT 40
0500  01575 000015  D13      DEC 13
0501  01576 020060  A0      ASC 1, 0

```

```

0503*
0504*
0505*
0506*
0507*
0508*
0509*
0510*
0511*
*****
0512 01577 000100 PMTST NOP
0513 01600 017625R JSB PMNXT
0514 01601 002003 SZR,RSS IS PARAMETER THERE?
0515 01602 127577R JMP PMTST,I NO - TAKE L+1 EXIT
0516 01603 037577R ISZ PMTST
0517 01604 067232R LDB PMLOC
0518 01605 006004 INB SET UP TO GET TYPE
0519 01606 164001 LDB B,I B= TYPE/SIZE
0520 01607 006021 SSB,RSS ALPHABETIC?
0521 01610 027613R JMP *+3
0522 01611 037577R ISZ PMTST NO - NUMERIC
0523 01612 127577R JMP PMTST,I TAKE L+3 EXIT
0524 01613 054054 CPB ,+1 1 CHAR?
0525 01614 002001 RSS YES
0526 01615 026741R JMP PILLG *NO - TAKE 'ILLEG.PARM.' EXIT ***
0527 01616 016774R JSB GETC GET THE CHARACTER
0528 01617 127577R JMP PMTST,I TAKE L+2 EXIT
0529*
0530* ** BMPNT - SET DUMP PARAM = -1 AND BUMP POINTER **
0531*
0532 01620 000000 BMPNT NOP
0533 01621 003400 B3400 OCT 3400 -CCA- INSTRUCTION
0534 01622 173571R STA EQPNT,I
0535 01623 037571R ISZ EQPNT
0536 01624 127620R JMP BMPNT,I
0537*
0538 01625 000000 PMNXT NOP
0539 01626 037232R ISZ PMLOC
0540 01627 163232R LDA PMLOC,I
0541 01630 127625R JMP PMNXT,I
0542*
0543*
0544*
0545*
0546*
0547*
0548*
0549*
0550*
0551*
*****
0552 01631 007104R DEF SPDMP
0553 01632 063631R PDUMP LDA *-1
0554 01633 027636R JMP ADUMP+1 SET POST-MORTEM POINTER
0555 01634 007100R DMPAD DEF SADMP
0556 01635 063634R ADUMP LDA *-1 SET ABORT POINTER
0557 01636 073571R STA EQPNT
0558 01637 067353R LDB RDSYS READ IN SYSTEM BUFFER SECTOR

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0559	01640	017356R	JSB SYSB	
0560	01641	170001	STA B,I	
0561	01642	006004	INB	
0562	01643	170001	STA B,I	
0563	01644	006004	INB	
0564	01645	170001	STA B,I	
0565	01646	006004	INB	
0566	01647	170001	STA B,I	
0567	01650	017577R	JSB PMTST	
0568	01651	027751R	JMP ADMP9	NO PARAMS
0569	01652	027735R	JMP ADMP7	1 CHAR ALFA.
0570	01653	064043	LDB ,=8	NUMERIC, CONVERT FWA TO BINARY
0571	01654	016605R	JSB ASCNV	
0572	01655	173571R	STA EQPNT,I	
0573	01656	003004	CMA,INA	
0574	01657	073566R	STA EQLST	
0575	01660	037571R	ISZ EQPNT	
0576	01661	003400	CCA	
0577	01662	173571R	STA EQPNT,I	SET LWA = -1 IN CASE OF SKIP
0578	01663	037232R	ISZ PMLOC	
0579	01664	017577R	JSB PMTST	GET POSSIBLE LWA
0580	01665	027722R	JMP ADMPX	NO PARAMETERS
0581	01666	027703R	JMP ADMP2	ALFA
0582	01667	064043	LDB ,=8	NUMERIC
0583	01670	016605R	JSB ASCNV	GO CONVERT LWA
0584	01671	173571R	STA EQPNT,I	
0585	01672	043566R	ADA EQLST	LWA-FWA OF DUMP
0586	01673	002020	SSA	FWA GRTR THAN LWA?
0587	01674	027676R	JMP SLSTE	YES, IT'S A LIMIT ERROR
0588	01675	037571R	ISZ EQPNT	
0589	01676	037232R	ISZ PMLOC	BUMP PARAMETER POINTER
0590	01677	017577R	JSB PMTST	GET POSSIBLE B
0591	01700	027722R	JMP ADMPX	NO PARAMETERS
0592	01701	027704R	JMP **3	
0593	01702	026741R	JMP PILLG	NUMERIC- ERROR 'ILLEGAL PARAM'
0594	01703	037571R	ADMP2 ISZ EQPNT	BUMP DUMP POINTER
0595	01704	053475R	CPA B102	IS NEXT PARAM. B?
0596	01705	027710R	JMP ADMP3	YES
0597	01706	037571R	ISZ EQPNT	NO - SKIP POINTER AROUND 'B' PRA
0598	01707	027716R	JMP ADMP4	
0599	01710	017620R	ADMP3 JSB BMPNT	SET 'B' PARAMETER
0600	01711	037232R	ISZ PMLOC	BUMP PARAMETER POINTER
0601	01712	017577R	JSB PMTST	GET POSSIBLE 'L'
0602	01713	027722R	JMP ADMPX	NO PARAMS.
0603	01714	002001	RSS	ALFA
0604	01715	026741R	JMP PILLG	NUMERIC PARAM. - 'ILLEGAL PARAM.
0605	01716	053755R	ADMP4 CPA B114	CHAR. = L?
0606	01717	002001	RSS	YES
0607	01720	026741R	JMP PILLG	NO - 'ILLEGAL PARAMETER'
0608	01721	017620R	ADMP6 JSB BMPNT	SET 'L' DUMP FLAG
0609	01722	067354R	ADMPX LDB WRSYS	WRITE 'BUFFER' TO SYSTEM BUFFER
0610	01723	017356R	JSB SYSB	
0611	01724	002404	CLA,INA	PUT FLAG BIT IN POSN 0
0612	01725	007004	CMB,INB	
0613	01726	047631R	ADB PDUMP-1	
0614	01727	006021	SSB,RSS	ABORT DUMP PROCESSING?

0615	01730	000123	B123	OCT 123	-RAR- INSTRUCTION
0616	01731	030113		IOR DUMPS	NO - LEAVE ALONE
0617	01732	067215R		LDB XDUMP	
0618	01733	016430R		JSB EXSET	SET DUMP FLAG BIT
0619	01734	026311R		JMP RNS	GO READ NEXT STATE.
0620*					
0621	01735	053755R	ADMP7	CPA B114	CHAR. = L?
0622	01736	027745R		JMP ADMP8	YES
0623	01737	053475R		CPA B102	NO - IS CHAR. B?
0624	01740	002001		RSS	YES
0625	01741	026741R		JMP PILLG	NO - ERROR 'ILLEGAL PARAM'
0626	01742	017620R		JSB BMPNT	SET FLAGS FOR MAIN PROG DUMP
0627	01743	017620R		JSB BMPNT	
0628	01744	027710R		JMP ADMP3	
0629*					
0630	01745	063571R	ADMP8	LDA EQPNT	
0631	01746	040056		ADA .+3	
0632	01747	073571R		STA EQPNT	SKIP OVER PROG AND 'B' PARAMS.
0633	01750	027721R		JMP ADMP6	
0634*					
0635	01751	017620R	ADMP9	JSB BMPNT	SET FLAGS FOR COMPLETE DUMP
0636	01752	017620R		JSB BMPNT	
0637	01753	017620R		JSB BMPNT	
0638	01754	027721R		JMP ADMP6	
0639*					
0640	01755	000114	B114	OCT 114	
0641	01756	000116	B116	OCT 116	'N'
0642	01757	000454	D300	DEC 300	
0643*					
0001*					*****
0002*					* JFILE - SET UP PARAMETERS TO GET SOURCE FILE *
0003*					* FROM USER DIRECTORY *
0004*					*****
0005	01760	017651R	JFILE	JSB USERD	SEARCH USER DIREC. FOR FILENAME
0006	01761	026126R		JMP PMISS	NO - GO TO 'PARAM MISSING' DIAG.
0007	01762	002103		CLE, SZA, RSS	IS IT THERE?
0008	01763	026275R		JMP RUN2	NO - GO TO 'UNDEF FILE' DIAGN.
0009	01764	064000		LDB A	YES - CHECK FOR SOURCE FILE
0010	01765	044055		ADB .+2	B - ADDR OF 3RD WORD IN ENTRY
0011	01766	160001		LDA B, I	
0012	01767	010073		AND B177	EXTRACT TYPE
0013	01770	050064		CPA .+11B	IS IT A SOURCE ST. FILE?
0014	01771	006006		INB, RSS	-YES
0015	01772	026741R		JMP PILLG	NO - GO TO 'PARAM, ILLEG' DIAG.
0016	01773	160001		LDA B, I	GET STARTING TRACK/SECTOR
0017	01774	067213R		LDB XJFIL	SET PARAMETERS IN -
0018	01775	016430R		JSB EXSET	- JFILS
0019	01776	016430R		JSB EXSET	- JFILC
0020	01777	060161		LDA CUDSC	
0021	02000	064073		LDB XJFSC	
0022	02001	016430R		JSB EXSET	
0023	02002	026311R		JMP RNS	GO TO NEXT STATEMENT


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0025* *****
0026* * INDSC = INIT. LABEL ON USER DISC *
0027* *
0028* * UDISC = CHANGE USER DISC SUBCHNL *
0029* *****
0030 02003 060111 INDSC LDA BATCH
0031 02004 050054 CPA ,+1 REQUEST FROM SYS TTY?
0032 02005 002001 RSS -YES
0033 02006 026711R JMP IGNOR -NO, ILLEGAL
0034 02007 003401 CCA,RSS
0035 02010 002400 UDISC CLA
0036 02011 072177R STA IUFLG SET IN/UD FLAG = -1/0
0037 02012 037232R ISZ PMLOC
0038 02013 167232R LDB PMLOC,I GET ADDR8: LABEL PARAMETER
0039 02014 037232R ISZ PMLOC
0040 02015 076205R STB LABEL
0041 02016 006003 SZB,RSS IS THERE A LABEL PARAM?
0042 02017 026067R JMP IU1 -NO
0043 02020 076036R STB LBLMV -YES, SET ADDR8 FOR MOVE
0044 02021 067374R LDB BLNKS
0045 02022 076205R STB LABEL
0046 02023 076206R STB LABEL+1
0047 02024 076207R STB LABEL+2
0048 02025 167232R LDB PMLOC,I GET LABEL LENGTH
0049 02026 005423 BLR,RBR
0050 02027 060001 LDA B
0051 02030 044044 ADB ,=7
0052 02031 006021 SSB,RSS LENGTH > 6?
0053 02032 060061 LDA ,+6 -YES, SET TO 6
0054 02033 066170R LDB DFLBL GET DEST. LABEL ADDR8
0055 02034 005200 RBL AND ADJUST FOR MOVE
0056 02035 017003R JSB MOVE
0057 02036 000000 LBLMV NOP
0058 02037 062205R LDA LABEL GET 1ST 2 CHARS OF LABEL
0059 02040 010075 AND B1774 MASK OFF UPPER CHAR
0060 02041 052204R CPA UPAST 1ST CHAR = "*" ?
0061 02042 026075R JMP IU2 -YES
0062 02043 052202R CPA UPCOM
0063 02044 026155R JMP SKPPR
0064 02045 067455R LDB DDFLG GET DISC DUMP FLAG
0065 02046 004010 SLB DUMP SYSTEM OR ENTIRE DISC?
0066 02047 026741R JMP PILLG -YES, LABEL ILLEGAL
0067 02050 052203R CPA UBLNK 1ST CHAR = BLANK
0068 02051 026741R JMP PILLG -YES, ILLEGAL
0069 02052 002003 SZB,RSS 1ST CHAR = ZERO
0070 02053 026741R JMP PILLG -YES, ILLEGAL
0071 02054 062177R LDA IUFLG
0072 02055 002021 SSA,RSS INIT. LABEL?
0073 02056 026075R JMP IU2 -NO, DON'T CHECK 'SYSTEM'
0074 02057 062210R LDA ASCSY *
0075 02060 052205R CPA LABEL *
0076 02061 066206R LDB LABEL+1 * LABEL
0077 02062 056211R CPB ASCSY+1 *
0078 02063 062207R LDA LABEL+2 * 'SYSTEM'?
0079 02064 052212R CPA ASCSY+2 *
0080 02065 026741R JMP PILLG -YES, ILLEGAL

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0081	02066	026075R		JMP IU2	
0082	02067	066177R	IU1	LDB IUFLG	
0083	02070	006002		SZB	IS THIS AN *IN* REQUEST?
0084	02071	026126R		JMP PMISS	-YES, MUST HAVE LABEL
0085	02072	063171R		LDA PMCNT	
0086	02073	002003		SZA,RSS	
0087	02074	026121R		JMP IU3,5	
0088	02075	016515R	IU2	JSB ASCDC	
0089	02076	026116R		JMP IU3	
0090	02077	067455R		LDB DDFLG	
0091	02100	050155		CPA SYSSC	DD OR DD,X TO SYSTEM?
0092	02101	006011		SLB,RSS	-YES, ILLEGAL
0093	02102	002001		RSS	
0094	02103	026741R		JMP PILLG	
0095	02104	037232R		ISZ PMLOC	
0096	02105	167232R		LDB PMLOC,I	
0097	02106	006021		SSB,RSS	
0098	02107	026741R		JMP PILLG	-NO, ILLEGAL
0099	02110	072200R	IU2,5	STA SCHNL	
0100	02111	003004		CMA,INA	
0101	02112	040156		ADA LSTSC	IS SUBCHNL ON SYSTEM?
0102	02113	002020		SSA	-NO, ILLEGAL
0103	02114	026741R		JMP PILLG	
0104	02115	026123R		JMP IU4	
0105	02116	067455R	IU3	LDB DDFLG	DD OR DD,X?
0106	02117	004010		SLB	-YES, MUST HAVE SUBCHNL
0107	02120	026126R		JMP PMISS	
0108	02121	060156	IU3,5	LDA LSTSC	
0109	02122	003001		CMA,RSS	
0110*					
0111	02123	062200R	IU4	LDA SCHNL	
0112	02124	066177R		LDB IUFLG	
0113	02125	016162R		JSB JEXUD	
0114*					
0115	02126	066177R		LDB IUFLG	
0116	02127	006020		SSB	ANY LABEL?
0117	02130	026146R		JMP INCHK	
0118	02131	066205R		LDB LABEL	NO- DIRECTIVE IS :UD
0119	02132	006003		SZB,RSS	YES- IS UD REJECTED?
0120	02133	026311R		JMP RNS	YES
0121	02134	002002		SZA	GET DISC DUMP FLAG
0122	02135	026142R		JMP IU5	DDUMP REQ?
0123	02136	067455R		LDB DDFLG	-NO
0124	02137	006003		SZB,RSS	-YES
0125	02140	026311R		JMP RNS	
0126	02141	027151R		JMP DDCMP	
0127*					
0128	02142	060111	IU5	LDA BATCH	BATCH MODE?
0129	02143	060112		CPA SYSTY	
0130	02144	026136R		JMP RNSY	NO.
0131	02145	026450R		JMP EJOBX+1	YES- BATCH ABORT!
0132*					
0133	02146	002303	INCHK	CCE,SZA,RSS	
0134	02147	026311R		JMP RNS	
0135	02150	001225		RAL,ERA	
0136	02151	064000		LDB A	

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0137 02152 002400      CLA
0138 02153 017706R     JSB PURGE
0139 02154 026311R     JMP RNS
0140*
0141 02155 022205R SKPPR XOR LABEL
0142 02156 022201R     XOR B60
0143 02157 006400      CLB
0144 02160 076205R     STB LABEL
0145 02161 026110R     JMP IU2.5
0146*
0147 02162 000000      JEXUD NOP
0148 02163 072200R     STA SCHNL
0149 02164 076177R     STB IUFLG
0150 02165 016001X     JSB EXEC
0151 02166 002173R     DEF ++5
0152 02167 007545R     DEF D23
0153 02170 002205R DFLBL DEF LABEL
0154 02171 002200R     DEF SCHNL
0155 02172 002177R     DEF IUFLG
0156 02173 064200      LDB DISCL
0157 02174 006004      INB
0158 02175 076773R     STB USDIR
0159 02176 126162R     JMP JEXUD,I
0160*
0161 02177 000000      IUFLG NOP
0162 02200 000000      SCHNL NOP
0163 02201 000060      B60 OCT 60
0164 02202 026000      UPCOM OCT 026000
0165 02203 020000      UBLNK OCT 020000
0166 02204 025000      UPAST OCT 025000
0167 02205 000000      LABEL BSS 3
0168 02210 051531      ASCSY ASC 3,SYSTEM

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0170*

0171	02213	064331	SSRCH	LDB	SSFLG
0172	02214	056371R		CPB	AND
0173	02215	026073R		JMP	BDCTL
0174	02216	006400		CLB	
0175	02217	076254R		STB	JSFLG
0176	02220	016515R		JSB	ASCDC
0177	02221	026246R		JMP	SCALL
0178	02222	052255R		CPA	D99
0179	02223	026250R		JMP	SSSET
0180	02224	006404	SLOOP	CLB,INB	
0181	02225	002003		SZA,RSS	
0182	02226	026237R		JMP	STBIT
0183	02227	003004		CMA,INA	
0184	02230	072236R		STA	RRLSC
0185	02231	040156		ADA	LSTSC
0186	02232	002020		S9A	
0187	02233	026741R		JMP	PILLG
0188	02234	002400		CLA	
0189	02235	016436R		JSB	..RRL
0190	02236	000000	RRLSC	NOP	
0191	02237	062254R	STBIT	LDA	JSFLG
0192	02240	030001		IOR	B
0193	02241	072254R		STA	JSFLG
0194	02242	037232R		ISZ	PMLQC
0195	02243	016515R		JSB	ASCDC
0196	02244	026250R		JMP	SSSET
0197	02245	026224R		JMP	SLOOP
0198	02246	060156	SCALL	LDA	LSTSC
0199	02247	003001		CMA,RSS	
0200	02250	062254R	SSSET	LDA	JSFLG
0201	02251	067221R		LDB	X9FLG
0202	02252	016430R		JSB	EXSET
0203	02253	026311R		JMP	RNS

0204*

0205	02254	000000	JSFLG	NOP
0206	02255	000143	D99	DEC 99

:SS ALLOWED?

-NO, BAD CNTRL STATEMENT

GET 1ST SUBCHNL PARAM

NONE = SET TO SRCH ALL SUBCHNLS

PARAM = 99?

-YES, TURN OFF SRCH

*

*

*

* SET TO

*

* SEARCH

*

*

* SPECIFIED

*

*

* SUBCHANNELS

*

*

*

*

SET SS FLAG IN BASE PAGE

```

0208*
0209*
0210*
0211*
0212*
0213*
0214*
0215 02256 000000 LSTRT NOP
0216 02257 017651R JSB USERD
0217 02260 026126R JMP PMISS
0218 02261 002002 SZA
0219 02262 026277R JMP LSTR1
0220 02263 063760R LDA SAVPM
0221 02264 073232R STA PMLOC
0222 02265 067477R LDB LUN2
0223 02266 077623R STB FLUN
0224 02267 167232R LDB PMLOC,I GET PARAMETER ORIGIN
0225 02270 017625R JSB PMNXT GET CHAR COUNT OF PARAM. NAME
0226 02271 017501R JSB DIRSR
0227 02272 000114 DEF SYSDR SYST DIRECTORY T/S
0228 02273 002102 CLE,SZA NAME IN FILE?
0229 02274 026277R JMP LSTR1 YES
0230 02275 017117R RUN2 JSB FNUND GO GIVE UNDEF. FILENAME DIAG.
0231 02276 026133R JMP PMS BATCH ABORT
0232 02277 073600R LSTR1 STA TEMP SAVE ADDRESS OF ENTRY
0233 02300 040055 ADA ,+2
0234 02301 160000 LDA A,I EXTRACT ENTRY TYPE
0235 02302 010073 AND B177 EXTRACT ENTRY TYPE
0236 02303 050056 CPA ,+3 MAIN USER PROG?
0237 02304 026310R JMP MVEN4 YES
0238 02305 062307R LDA ,+2 NO - ERROR
0239 02306 026127R JMP PMISS+1 'ILLEGAL PROG. TYPE'
0240 02307 004154R DEF SSIMP+10
0241*
0242 02310 066514R MVEN4 LDB EXPGL MOVE ENTRY TO DEST. BUFFER (EXPGL
0243 02311 062513R LDA DM11 =11
0244 02312 073046R STA MORG
0245 02313 163600R LDA TEMP,I GET WORD TO BE STORED
0246 02314 016430R JSB EXSET STORE IT
0247 02315 037600R ISZ TEMP
0248 02316 037046R ISZ MORG IS 11TH WORD STORED?
0249 02317 026313R JMP ,+4 NO
0250 02320 002400 CLA * * *
0251 02321 067572R LDB RONLC * CLEAR
0252 02322 016430R JSB EXSET * RONBF
0253 02323 016430R JSB EXSET * THRU
0254 02324 016430R JSB EXSET * RONBF+4
0255 02325 016430R JSB EXSET * (5 PARAM LOCNS)
0256 02326 016430R JSB EXSET * * *
0257 02327 126256R JMP LSTRT,I
0258*
0259*
0260*
0261*
0262*
0263 02330 016256R RUN JSB LSTRT GO TO FILENAME SEARCH AND MISC.

```

0264	02331	017625R	JSB PMNXT	
0265	02332	002002	SZA	PARAMETER PRESENT?
0266	02333	026336R	JMP ++3	YES
0267	02334	060046	LDA .-5	NO
0268	02335	026345R	JMP RUN3A	(PARAM, PRESENT IF HERE)
0269	02336	063232R	LDA PMLOC	
0270	02337	002004	INA	
0271	02340	160000	LDA A, I	
0272	02341	002021	SSA, RSS	IS PARAM, NUMERIC?
0273	02342	026334R	JMP RUN3	NO
0274	02343	064041	LDB .-10	YES
0275	02344	016605R	JSB ASCNV	GO CONVERT A DEC, PARAMETER
0276	02345	073600R	STA TEMP	
0277	02346	167232R	LDB PMLOC, I	
0278	02347	006003	SZB, RSS	IS 'N' PRESENT?
0279	02350	026372R	JMP RUN4	NO
0280	02351	002020	SSA	MAYBE, IS TIME THERE?
0281	02352	026355R	JMP ++3	NO
0282	02353	037232R	ISZ PMLOC	
0283	02354	037232R	ISZ PMLOC	
0284	02355	163232R	LDA PMLOC, I	
0285	02356	002003	SZA, RSS	IS 'N' PRESENT(MAYBE)?
0286	02357	026372R	JMP RUN4	NO
0287	02360	016774R	JSB GETC	GET THE CHARACTER
0288	02361	037232R	ISZ PMLOC	
0289	02362	053756R	CPA B116	IS CHAR='N'?
0290	02363	060051	LDA .-2	YES = SETUP TO TEST FOR RT.COUNT
0291	02364	143232R	ADA PMLOC, I	
0292	02365	050052	CPA .-1	WAS IT 1 CHAR = N?
0293	02366	002001	RSS	YES
0294	02367	026741R	JMP PILLG	NO = ILLEGAL CHAR
0295	02370	067217R	LDB XNFLA	
0296	02371	016430R	JSB EXSET	SET 'N' FLAG(NO ABORT)
0297	02372	060106	LDA CLEX	GET CURRENT EXECUTION TIME
0298	02373	001665	ELA, CLE, ERA	CLEAR THE EXECUTION BIT
0299	02374	064107	LDB CLEX+1	GET THE 1/100 MINUTE COUNTER
0300	02375	047757R	ADB D300	
0301	02376	006021	SSB, RSS	IS MORE THAN 1/2 MIN LEFT IN CNT
0302	02377	002004	INA	YES, ADD 1 TO EXEC TIME COUNT
0303	02400	072256R	STA LSTRA	SAVE NEW EXEC TIME
0304	02401	067210R	LDB XCLEX	
0305	02402	006004	INB	8 POINTS AT CLEX+1
0306	02403	063231R	LDA DM600	
0307	02404	016430R	JSB EXSET	RESET CLEX+1 = -600
0308	02405	063600R	LDA TEMP	GET TIME LIMIT FOR RUN
0309	02406	002020	SSA	
0310	02407	003004	CMA, INA	
0311	02410	042256R	ADA LSTRA	ADD CURRENT EXEC TIME
0312	02411	016430R	JSB EXSET	SET EXECUTION MAXIMUM TIME
0313	02412	062256R	LDA LSTRA	GET EXEC TIME TO SET RUNNING
0314	02413	067210R	LDB XCLEX	
0315	02414	016430R	JSB EXSET	START EXECUTION TIMER
0316	02415	063623R	LDA FLUN	
0317	02416	066427R	LDB SLFLO	
0318	02417	053477R	CPA LUN2	
0319	02420	002400	CLA	

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0320 02421 016430R JSB EXSET SET LSTCH NOT 0
0321 02422 016001X JSB EXEC
0322 02423 002425R DEF **2
0323 02424 002426R DEF **2
0324 02425 026450R JMP EJOBX+1
0325 02426 177754 DEC -20
0326 02427 000326 SLFLO DEF LSTCH
0327 02256 LSTRA EQU LSTRT
0328*
0329*
0330* *****
0331* * EXSET = STORE DATA IN PROTECTED AREA OF MEMORY *
0332* * A = VALUE TO BE STORED; B = LOCATION IN CORE. *
0333* * ON RETURN A IS UNCHANGED; B IS 1 GREATER. *
0334* *****
0334 02430 000000 EXSET NOP
0335 02431 016001X JSB EXEC GO TO EXEC
0336 02432 002434R DEF **2
0337 02433 002435R DEF **2
0338 02434 126430R JMP EXSET,I
0339 02435 177755 DEC -19
0340*
0341 02436 000000 ..RRL NOP
0342 02437 072162R STA JEXUD
0343 02440 162436R LDA ..RRL,I
0344 02441 072430R STA EXSET
0345 02442 062162R LDA JEXUD
0346 02443 036436R ISZ ..RRL
0347 02444 000066 .RRL1 CLE,ELA
0348 02445 005600 ELB
0349 02446 001326 RAR,ELA
0350 02447 036430R ISZ EXSET
0351 02450 026444R JMP .RRL1
0352 02451 126436R JMP ..RRL,I
0353*
0354* *****
0355* * PROG = SET UP PROGNAME AND ITS 5 PARAMETERS *
0356* * FOR ENTRY TO LOAD AND EXECUTION OF SAME. *
0357* *****
0358 02452 016256R PROG JSB LSTRT GO TO FILENAM SEARCH AND MISC.
0359 02453 064101 PRG20 LDB JBINS
0360 02454 006002 SZB HAS A JBIN TRACK BEEN SAVED?
0361 02455 026475R JMP PRG10 YES = GO BACK
0362 02456 060160 LDA SYSTS GET NEXT T/S (B=0)
0363 02457 016436R JSB ..RRL TRK TO LOWER B, SECTR IN A
0364 02460 177770 DEC -8
0365 02461 002002 SZA IS IT A FRESH TRACK?
0366 02462 006004 INB NO, BUMP TRK NO.
0367 02463 007004 CMB,INB SET B = NEG. OF 1ST AVAIL WK TRK
0368 02464 060154 LDA DISCO
0369 02465 010074 AND 8377
0370 02466 044000 ADB A
0371 02467 006020 SSB WILL JBIN TRK BE IN 'USER' AREA?
0372 02470 026475R JMP PRG10 YES, DO NOT SET JBIN TRACK.
0373 02471 001727 ALF,ALF POSITION THE TRACK
0374 02472 067212R LDB XJBIN SET JOB BIN. TRACK # INTO -
0375 02473 016430R JSB EXSET = JBINS

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0376 02474 016430R JSB EXSET
0377 02475 060046 PRG10 LDA =5
0378 02476 073570R STA EQCNT
0379 02477 063572R LDA RONLC
0380 02500 073571R STA EQPNT
0381 02501 016515R PRG11 JSB ASCDC
0382 02502 026415R JMP SLDEX
0383 02503 067571R LDB EQPNT
0384 02504 016430R JSB EXSET
0385 02505 037571R PRG12 ISZ EQPNT
0386 02506 037232R ISZ PMLOC
0387 02507 037570R ISZ EQCNT
0388 02510 026501R JMP PRG11
0389 02511 026415R JMP SLDEX
0390*
0391 02512 020000 B20K OCT 20000
0392 02513 177765 DM11 DEC =11
0393 02514 000141 EXPGL DEF EXPG

```

= JBINC
 * PICK UP AND STORE PROG. PARAMS*
 SET COUNTER FOR MAX OF 5

SET POINTER TO 1ST LOC IN RONBF
 TEST PARAM AND CONVERT TO BIN.
 NOT THERE = GO TO RON'S LOADER

STORE A PARAMETER
 BUMP RONBF POINTER
 BUMP PMTBL POINTER
 LAST PARAM IN?

NO
 YES = GO TO RON'S LOADER/EXEC.

LOCN OF EXECUTING POS BUFFER


```

0395*
0396*
0397*
0398*
0399*
0400*
0401 02515 000000 ASCDC NOP
0402 02516 017625R JSB PMNXT
0403 02517 002003 SZA,RSS IS NEXT PARAMETER THERE?
0404 02520 126515R JMP ASCDC,I NO - EXIT L+1
0405 02521 064041 LDB ,=10 SET B FOR DEC CONVERSION
0406 02522 016605R JSB ASCNV GO TO ASCII CONVERSION ROUTINE
0407 02523 036515R ISZ ASCDC
0408 02524 126515R JMP ASCDC,I EXIT L+2, A=BINARY VALUE
0409*
0410*
0411*
0412*
0413*
0414*
0415*
0416*
0417*
0418*
0419 02525 000000 CNDEC NOP ENTER DECIMAL
0420 02526 066556R LDB A00 '00'?
0421 02527 076561R STB CNMBR+1
0422 02530 076562R STB CNMBR+2
0423 02531 076563R STB CNMBR+3
0424 02532 066560R LDB CNMBR
0425 02533 044056 ADB ,+3
0426 02534 044052 CNORG ADB ,=1
0427 02535 076557R STB CNMLC SET STORAGE LOCATION
0428 02536 002003 SZA,RSS IS A=0? (ARE WE DONE?)
0429 02537 026553R JMP CNOUT YES - GO TO EXIT
0430 02540 016564R JSB DVUKN DIVIDE BY 8 OR 10
0431 02541 146557R ADB CNMLC,I
0432 02542 176557R STB CNMLC,I SET IT IN NUMBER BUFFER
0433 02543 002003 SZA,RSS ARE WE DONE?
0434 02544 026553R JMP CNOUT YES - GO TO EXIT
0435 02545 016564R JSB DVUKN DIVIDE BY 8 OR 10
0436 02546 005727 BLF,BLF
0437 02547 146557R ADB CNMLC,I
0438 02550 176557R STB CNMLC,I SET IT IN NUMBER BUFFER
0439 02551 066557R LDB CNMLC
0440 02552 026534R JMP CNORG GO GET NEXT 2 DIGITS
0441*
0442 02553 062563R CNOUT LDA CNMBR+3
0443 02554 066562R LDB CNMBR+2
0444 02555 126525R JMP CNDEC,I
0445*
0446 02556 030060 A00 ASC 1,00
0447 02557 000000 CNMLC NOP
0448 02560 002561R CNMBR DEF ++1
0449 02561 000000 OCT 0,0,0 NUMBER BUFFER
0450*

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0451	02564	000000	DVUKN	NOP	
0452	02565	006400		CLB	CLEAR LOOP COUNTER = QUOTIENT +
0453	02566	076604R		STB DVTMP	
0454	02567	070001	DVU00	STA B	FLAG ALLOW BIT15 OF # TO BE SET
0455	02570	040041	DVU01	ADA ,=-10	DIVIDE BY SUCCESSIVE SUBTRACTION
0456	02571	036604R		ISZ DVTMP	
0457	02572	002021		SSA,RSS	DONE IF A IS NEG AND B IS POS
0458	02573	026567R		JMP DVU00	CLEAR B TO ALLOW EXIT
0459	02574	006020		SSB	EXIT IF POS
0460	02575	026570R		JMP DVU01	ORIGINAL # TO CONVERT WAS NEG
0461	02576	064041		LDB ,=-10	DONE
0462	02577	007004		CMB,INB	
0463	02600	044000		ADB A	REMAINDER TO B
0464	02601	062604R		LDA DVTMP	
0465	02602	040052		ADA ,=-1	QUOTIENT TO A
0466	02603	126564R		JMP DVUKN,I	EXIT
0467	02604	000000	DVTMP	BSS 1	
0468*	*****				
0469*	*****				
0470*	* ASCNV = CONVERT AN ASCII INTEGER TO BINARY *				
0471*	* ENTRY = B = -10 FOR DECIMAL CONVERSION *				
0472*	* B = -8 FOR OCTAL CONVERSION *				
0473*	* PMLOC POINTS TO CURR. PMTBL ENTRY*				
0474*	* EXIT = VALUE IS IN A. *				
0475*	* AN ERROR WILL RETURN TO 'RNSX' TO RE-READ. *				
0476*	*****				
0477	02605	000000	ASCNV	NOP	
0478	02606	076735R		STB ASMOD	SET MODE PARAMETER
0479	02607	163232R	ASCNW	LDA PMLOC,I	GET VALUE OF CURRENT PARAMETER
0480	02610	072737R		STA PNTR	SET ADDR AND POS'N OF ASCII CHAR
0481	02611	063232R		LDA PMLOC	GET PMTBL POINTER
0482	02612	002004		INA	
0483	02613	160000		LDA A,I	TYPE/CHAR COUNT TO A
0484	02614	002021		SSA,RSS	IS TYPE NUMERIC? SKIP IF TRUE.
0485	02615	026674R		JMP ASCHR	JUMP TO 'NON-NUM. PARAM.' EXIT
0486	02616	001665		ELA,CLE,ERA	CLEAR TYPE BIT
0487	02617	003004		CMA,INA	
0488	02620	072734R		STA ASCNT	SAVE CHARACTER COUNT
0489	02621	002400		CLA	
0490	02622	072740R	ASCN1	STA VALUE	SAVE CURRENT NUMBER VALUE.
0491	02623	062737R		LDA PNTR	GET POINTER TO ASCII DIGIT
0492	02624	016774R		JSB GETC	GET DIGIT FROM PARAMETER STRING
0493	02625	036737R		ISZ PNTR	BUMP PARAMETER POINTER
0494	02626	042743R		ADA BM60	=60B(ASCII 0) FROM CHAR.
0495	02627	066735R		LDB ASMOD	
0496	02630	002020		SSA	IS DIGIT NUMERIC?
0497	02631	026674R		JMP ASCHR	NO = JUMP TO 'NON-NUM. CHAR.' EXI
0498	02632	044000		ADB A	
0499	02633	006021		SSB,RSS	IS DIGIT NUMERIC?
0500	02634	026674R		JMP ASCHR	NO = JUMP AS ABOVE
0501	02635	072736R		STA DIGIT	SAVE VALUE OF DIGIT
0502	02636	062740R		LDA VALUE	GET CURRENT VALUE
0503	02637	000066		CLE,ELA	
0504	02640	001610		ELA,SLA	WILL NUMBER OVER FLOW?
0505	02641	026662R		JMP ASCOV	YES = GO TO OV EXIT.
0506	02642	002040		SEZ	WILL IT OVER FLOW?

0507	02643	026662R	JMP	ASCOV	YES - GO TO OV EXIT.
0508	02644	066735R	LDB	ASMOD	
0509	02645	054041	CPB	.-10	IS MODE OCTAL?
0510	02646	042740R	ADA	VALUE	NO
0511	02647	001610	ELA	SLA	OVERFLOW?
0512	02650	026662R	JMP	ASCOV	YES - GO TO OV EXIT.
0513	02651	042736R	ADA	DIGIT	ADD IN NEW DIGIT
0514	02652	002040	SEZ		OVERFLOW?
0515	02653	026662R	JMP	ASCOV	YES - GO TO OV EXIT.
0516	02654	036734R	ISZ	ASCNT	LAST DIGIT PROCESSED?
0517	02655	026622R	JMP	ASCN1	NO - GO BACK FOR NEXT
0518	02656	072740R	STA	VALUE	
0519	02657	002020	SSA		IS NUMBER NEG?
0520	02660	054043	CPB	.-8	YES, IS IT OCTAL?
0521	02661	126605R	JMP	ASCNV,I	YES, TAKE NORMAL RETURN
0523	02662	062664R	ASCOV	LDA ++2	
0524	02663	026700R	JMP	ASCER	
0525	02664	002665R	DEF	++1	
0526	02665	047125	ASC	7,NUMBER OVERFLO	
0528	02674	062515R	ASCHR	LDA ASCDC	
0529	02675	052741R	CPA	PROGX	WAS ENTRY FROM 'PROG'?
0530	02676	026712R	JMP	ASCH5	YES, GO TEST FOR A COMMA
0531	02677	062702R	ASCH1	LDA ILDIG	
0532	02700	064062	ASCER	LDB .+7	7 WORD MESSAGE
0533	02701	026130R	JMP	PMISS+2	
0534	02702	002703R	ILDIG	DEF ++1	
0535	02703	044514	ASC	7,ILLEGAL	DIGIT
0536	02712	163232R	ASCH5	LDA PMLOC,I	GET THE ILLEGAL CHARACTER
0537	02713	016774R	JSB	GETC	
0538	02714	053253R	CPA	B54	IS IT A COMMA?
0539	02715	002001	RSS		YES
0540	02716	026677R	JMP	ASCH1	NO, GO PRINT 'ILLEGAL DIGIT'
0541	02717	037571R	ISZ	EQPNT	BUMP RONBF POINTER
0542	02720	063232R	LDA	PMLOC	
0543	02721	002004	INA		
0544	02722	164000	LDB	A,I	GET # OF CHARS IN PARAMETER
0545	02723	054054	CPB	.-1	WAS IT JUST ONE CHARACTER?
0546	02724	026731R	JMP	ASCH8	YES,GO BACK TO 'PROG' VIA BUMPR
0547	02725	046742R	ADB	B7777	B-1 TO B AND SET SIGN BIT
0548	02726	174000	STB	A,I	PUT INTO PARAMETER TABLE
0549	02727	137232R	ISZ	PMLOC,I	BUMP PARAMETER ORIGIN IN BUFFER
0550	02730	026607R	JMP	ASCNW	GO BACK AND RESTART PARAMETER
0551	02731	037570R	ASCH8	ISZ EQCNT	LAST 'PROG' PARAMETER?
0552	02732	026505R	JMP	PRG12	NO, GO BACK TO 'PROG' ROUTINE
0553	02733	026415R	JMP	SLDEX	YES, GO TO RON'S LOADER
0554*					
0555	02734	000000	ASCNT	NOP	SAVE CHARACTER COUNT
0556	02735	000000	ASMOD	NOP	SAVE MODE
0557	02736	000000	DIGIT	NOP	DIGIT STORED HERE
0558	02737	000000	PNTR	NOP	CHARACTER POINTER
0559	02740	000000	VALUE	NOP	VALUE ACCUMULATED HERE
0560	02741	002502R	PROGX	DEF PRG11+1	CONVERSION RETURN IN 'PROG'
0561	02742	077777	B7777	OCT 77777	
0562	02743	177720	BM60	OCT -60	

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0564* *****
0565* * ERRDG - PRINT A DIAGNOSTIC ON TTY *
0566* *   A = BUFFER ORIGIN *
0567* *   B = CHARACTER OR WORD COUNT *
0568* *****
0569 02744 000000 ERRDG NOP
0570 02745 072753R STA WRBUF
0571 02746 076763R STB WRLEN
0572 02747 016001X JSB EXEC
0573 02750 002755R DEF ++6
0574 02751 000051 DEF .-2 WRITE ON TTY
0575 02752 000054 DEF .+1 WITH WAIT
0576 02753 002753R WRBUF DEF *
0577 02754 002763R DEF WRLEN
0578 02755 002400 CLA
0579 02756 016765R JSB OPONF ENABLE OP. ATTN.
0580 02757 026762R JMP ++3 DON'T CLEAR BIT 15 OF SWAP
0581 02760 002404 CLA,INA
0582 02761 016430R JSB EXSET
0583 02762 126744R JMP ERRDG,I
0584 02763 000000 WRLEN NOP
0585 02764 000260 XOPTN DEF OPATN
0586*
0587 02765 000000 OPONF NOP
0588 02766 066764R LOB XOPTN
0589 02767 002002 SZA CHECK IF ENABLE/DISABLE
0590 02770 006006 INB,RSS -DISABLE, DON'T SET OP. ATTN.
0591 02771 016430R JSB EXSET -ENABLE, CLEAR OP. ATTN.
0592 02772 016430R JSB EXSET SET OPPLG ZERO/NON-ZERO
0593 02773 126765R JMP OPONF,I
0594*
0595* *****
0596* * GETC - GET AN ASCII CHARACTER *
0597* *   A = ADDR/POS'N OF CHARACTER *
0598* *   ON EXIT CHARACTER IS IN A(L) *
0599* *****
0600 02774 000000 GETC NOP
0601 02775 000065 CLE,ERA
0602 02776 160000 LOA A,I DGET WORD WITH CHARACTER
0603 02777 002041 SEZ,RSS IS IT IN UPPER?
0604 03000 001727 ALF,ALF YES - SHIFT TO LOWER A
0605 03001 010074 AND B377 CLEAR A UPPER
0606 03002 126774R JMP GETC,I
0607*
0608* *****
0609* * MOVE - MOVE A STRING OF CHARACTERS *
0610* *   A = NO. OF CHARACTERS IN STRING *
0611* *   LIMIT OF 256 CHARACTERS *
0612* *   B = ADDRESS/POS'N OF DESTINATION *
0613* *   2ND WORD OF LINK=ADDR/POS OF=ORG *
0614* *   LAST CHAR OF STRING IN 'A' ON EXIT *
0615* *****
0616 03003 000000 MOVE NOP
0617 03004 077044R STB MDEST SET DESTINATION OF STRING
0618 03005 010074 AND B377 CLEAR UPPER 1/2 OF COUNT
0619 03006 003004 CMA,INA

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0010	03007	073045R	STA MCNTR	SET CHARACTER COUNTER
0011	03010	163003R	LDA MOVE,I	
0012	03011	073046R	STA MORG	SET ORIGIN OF STRING
0013	03012	037003R	ISZ MOVE	BUMP EXIT FOR NORMAL RETURN
0014	03013	067045R	LDB MCNTR	
0015	03014	006003	SZB,RSS	COUNT=0?
0016	03015	127003R	JMP MOVE,I	YES, EXIT
0017	03016	067046R	MOVER LDB MORG	GET CURRENT CHAR. POINTER
0018	03017	004065	CLE,ERB	
0019	03020	160001	LDA B,I	GET CURR. CHAR.
0020	03021	002041	SEZ,RSS	
0021	03022	001727	ALF,ALF	POSITION IT
0022	03023	010074	AND B377	CLEAR A UPPER
0023	03024	073600R	STA TEMP	SAVE IT
0024	03025	067044R	LDB MDEST	GET CURR. DESTINATION POINTER
0025	03026	004065	CLE,ERB	
0026	03027	160001	LDA B,I	GET CURR. SLOT FOR CHAR.
0027	03030	002041	SEZ,RSS	
0028	03031	001727	ALF,ALF	POSITION IT
0029	03032	010075	AND B1774	CLEAR A LOWER
0030	03033	033600R	IOR TEMP	ADD IN NEW CHAR.
0031	03034	002041	SEZ,RSS	
0032	03035	001727	ALF,ALF	POSITION SET OF 2
0033	03036	170001	STA B,I	STORE THEM
0034	03037	037044R	ISZ MDEST	BUMP DESTINATION
0035	03040	037046R	ISZ MORG	AND ORIGIN POINTERS
0036	03041	037045R	ISZ MCNTR	IS LAST CHAR.MOVED?
0037	03042	027016R	JMP MOVER	NO - MOVE ANOTHER
0038	03043	127003R	JMP MOVE,I	RETURN HERE
0039*				
0040	03044	000000	MDEST NOP	STRING DESTINATION
0041	03045	000000	MCNTR NOP	CHARACTER COUNTER
0042	03046	000000	MORG NOP	STRING ORIGIN
0043*				
0044*				
0045*			*****	
0046*			* WMOVE = MOVE L+1 WORDS FROM 'A' TO 'B'. *	
0047*			* A=FWA OF ORIGIN; B=FWA OF DESTINATION *	
0048*			* L+1 = NO. OF WORDS TO BE MOVED *	
0049	03047	000000	WMOVE NOP	
0050	03050	073046R	STA MORG	SET FWA OF ORIGIN
0051	03051	163047R	LDA WMOVE,I	
0052	03052	037047R	ISZ WMOVE	
0053	03053	003004	CMA,INA	
0054	03054	073600R	STA TEMP	STORE WORD COUNT
0055	03055	163046R	LDA MORG,I	
0056	03056	170001	STA B,I	STORE A WORD
0057	03057	006004	INB	
0058	03060	037046R	ISZ MORG	
0059	03061	037600R	ISZ TEMP	DONE?
0060	03062	027055R	JMP *-5	NO
0061	03063	127047R	JMP WMOVE,I	YES - RETURN

```

0063* *****
0064* * SCANR - SCAN A JOB CONTROL STATEMENT *
0065* * - SETS FLAGS AND POINTERS IN THE *
0066* *   PARAMETER TABLE (PMTBL) *
0067* * -ON EXIT PMTBL IS SET UP FOR USE. *
0068* *   'PMLOC' POINTS AT PMCNT+1 *
0069* * *
0070* * PMTBL(PARAMETER TABLE) FORMAT *
0071* * ***** *
0072* * PMTBL * DEF * + 2 *
0073* * ***** *
0074* * PMCNT * NO. OF PARAMETERS IN TABLE *
0075* * ***** *
0076* * *1ST CONT CHAR*2ND CONT CHAR* *
0077* * ***** *
0078* * PARAM= * ADDR. OF 1ST CHARACTER SPS *
0079* *ETER ***** *
0080* *   # 1 *T* * # OF CHARS. *
0081* * ***** *
0082* * PARAM= * ADDR. OF 1ST CHARACTER *P* *
0083* * ETER ***** *
0084* *   # 2 *T* * # OF CHARS. *
0085* * ***** *
0086* * * * *
0087* * * * *
0088* * (THERE IS ROOM FOR 15 PARAMETERS.) *
0089* *   P=0; 1ST CHAR IS UPPER *
0090* *   P=1; 1ST CHAR IS LOWER *
0091* *   T=0; 1ST CHAR IS NON-NUMERIC *
0092* *   T=1; 1ST CHAR IS NUMERIC *
0093* *   (T IS BIT 15, THE SIGN BIT) *
0094* *   THE LAST PARAMETER IS FOLLOWED *
0095* *   BY A WORD OF ZEROS. *
0096* *****
0097 03064 000000 SCANR NOP
0098 03065 062216R LDA STLEN GET STATEMENT LENGTH(WORDS)
0099 03066 040123 ADA JBUFF
0100 03067 000066 CLE,ELA SET ADRESS OF LAST CHAR+1
0101 03070 073234R STA STEND SAVE IT
0102 03071 002400 CLA
0103 03072 073171R STA PMCNT SET PARAM COUNT = 0
0104 03073 067170R LDB PMTBL
0105 03074 077232R STB PMLOC SET PMLOC = 2ND LOCN IN PMTBL
0106 03075 004066 CLE,ELB NOW POINTS TO UPPER HALF LOCN.
0107 03076 060123 LDA JBUFF PICK UP ADDR.OF JBUF
0108 03077 000066 CLE,ELA
0109 03100 002004 INA
0110 03101 073106R STA SCNMV SET ORG FOR 2 CHAR MOVE
0111 03102 073233R STA JPNTR SET JPNTR TO 2ND CHAR OF JOB CRD
0112 03103 060055 LDA .+2 MOVE 2 CHARS TO PMTBL
0113 03104 017003R JSB MOVE
0114 03105 000000 SCNMV NOP POINTS TO 2ND CHAR JOB STATE.
0115 03106 017236R JSB JSRCH PASS OVER REST OF JOB CONT.WORD
0116 03107 037232R SCAN1 ISZ PMLOC
0117 03110 053574R CPA 040 LOWER BLANK
0118 03111 027151R JMP 0EXIT

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0119	03112	053234R	CPA	STEND	LAST WORD SCANNED?
0120	03113	027151R	JMP	SEXIT	YES = EXIT
0121	03114	037233R	SCAN2	ISZ JPNTR	SET JBUF POINTER TO NXT CHAR.
0122*			*	TEST FOR 1ST	CHAR NUMERIC OR ALPHA
0123	03115	063233R	LDA	JPNTR	GET JBUF POINTER
0124	03116	053234R	CPA	STEND	HAVE WE SCANNED LAST CHARACTER?
0125	03117	027151R	JMP	SEXIT	YES, GO TO SET UP EXIT
0126	03120	173232R	STA	PMLOC,I	STORE IN PARAMETER TABLE
0127	03121	016774R	JSB	GETC	GET 1ST CHAR OF PARAMETER
0128	03122	053574R	CPA	B40	IS IT A BLANK?
0129	03123	027114R	JMP	SCAN2	YES = GO BACK
0130	03124	037171R	ISZ	PMCNT	TEST FOR MORE THAN 15 PARAMETERS
0131	03125	067171R	LDB	PMCNT	
0132	03126	057257R	CPB	D16	HAS LIMIT BEEN REACHED?
0133	03127	027146R	JMP	SCAN5	YES, SKIP TO DEAGNOSTIC
0134	03130	037232R	ISZ	PMLOC	BUMP TBL PNTR
0135	03131	067167R	LDB	PMASK	A LOW =1ST CHAR; B = NUM,TYPE
0136	03132	043254R	ADA	BM72	=72B
0137	03133	002021	SSA,RSS		GRTR THAN 71B?
0138	03134	027137R	JMP	++3	YES, NOT NUMERIC
0139	03135	040065	ADA	,+12B	
0140	03136	002020	SSA		LESS THAN 60B?
0141	03137	005665	ELB,CLE,ERB		YES, NON=NUMERIC, SET TYPE=0
0142	03140	177232R	STB	PMLOC,I	SET TYPE OF PARAMETER
0143	03141	037233R	ISZ	JPNTR	BUMP JBUF POINTER
0144	03142	017236R	JSB	JSRCH	SCAN PARAMETER FOR ITS LENGTH
0145	03143	147232R	ADB	PMLOC,I	ADD TYPE TO LENGTH
0146	03144	177232R	STB	PMLOC,I	SAVE 2ND WORD OF PARAM,PAIR
0147	03145	027107R	JMP	SCAN1	= GO GET THE NEXT ONE
0148	03146	064063	SCAN5	LDB ,+8	
0149	03147	063156R	LDA	EXCES	
0150	03150	016744R	JSB	ERRDG	
0151	03151	006400	SEXIT	CLB	
0152	03152	177232R	STB	PMLOC,I	CLEAR LAST WORD IN TABLE
0153	03153	063170R	LDA	PMTBL	
0154	03154	073232R	STA	PMLOC	SET PMLOC=2ND WORD IN TABLE
0155	03155	127064R	JMP	SCANR,I	RETURN
0157	03156	003157R	EXCES	DEF ++1	
0158	03157	042530	ASC	8,EXTRA	PARAMETERS
0159	03167	100001	PMASK	OCT 100001	
0160	03170	003172R	PMTBL	DEF ++2	
0161	03171	000000	PMCNT	BSS 33	PARAM COUNT IS IN 1ST LOCN.
0162	03232	000000	PMLOC	NOP	POINTER FOR PMTBL
0163	03233	000000	JPNTR	NOP	POINTER FOR JBUF CHARACTERS
0164	03234	000000	STEND	NOP	ADDRESS OF LAST CHAR IN STATEMEN
0165	03235	177760	DM16	DEC -16	

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0167* *****
0168* * JSRCH = SCAN JBUF TO BLANK OR COMMA *
0169* * = JPNTR POINTS TO CURRENT CHAR. *
0170* * =ON EXIT B CONTAINS CHAR. COUNT *
0171* * A CONTAINS THE BLANK OR COMMA *
0172* *****
0173 03236 000000 JSRCH NOP
0174 03237 006400 CLB
0175 03240 063233R JSRCH1 LDA JPNTR
0176 03241 053234R CPA STEND HAVE WE SCANNED LAST CHAR IN STA
0177 03242 127236R JMP JSRCH,I YES, RETURN TO SCANR
0178 03243 016774R JSB GETC GET THE CURR.CHAR,
0179 03244 053574R CPA B40 BLANK?
0180 03245 002001 RSS
0181 03246 053253R CPA B54 COMMA?
0182 03247 127236R JMP JSRCH,I EXIT IF BLANK OR COMMA
0183 03250 006004 INB BUMP CHARACTER COUNT
0184 03251 037233R ISZ JPNTR BUMP ORIGIN POINTER
0185 03252 027240R JMP JSRCH1
0186*
0187 03253 000054 B54 OCT 54
0188 03254 177706 BM72 OCT =72
0189 03255 000000 CSAVE NOP
0190 03256 000000 TRFLG NOP
0191 03257 000020 D16 DEC 16
0192*
0193* *****
0194* * CKTRK = CHECK AVAILABLE TRACKS *
0195* * ENTRY = A = TRACK TO BE CHECKED *
0196* * LINKAGE = L JSB CKTRK *
0197* * L+1 ERROR EXIT(NO TRACKS AVL)*
0198* * L+2 NORMAL RETURN *
0199* * EXIT = A = 1ST AVAILABLE TRACK *
0200* * ON ERROR B=0 FOR TRACKS BEYOND TABLE *
0201* *****
0203 03260 003453R CKENT DEF RETRY
0204 03261 000000 CKTRK NOP
0205 03262 073255R STA CSAVE
0206 03263 063455R LDA DDFLG
0207 03264 033256R IOR TRFLG
0208 03265 000313 D203 DEC 203 -SLA- INSTRUCTION
0209 03266 027341R JMP CKT99
0210 03267 060154 LDA DISCO
0211 03270 010074 AND B377 LOW 8 BIT = # OF TRACK IN SYSTEM
0212 03271 003000 CMA
0213 03272 043255R ADA CSAVE
0214 03273 002021 SSA,RSS TRACK # TOO BIG
0215 03274 027313R JMP TBOMB YES: PRINT MESSAGE
0216 03275 060102 LDA JBINC
0217 03276 064161 LDB CUDSC
0218 03277 054155 CPB SYSSC CHECK IF USER ON SYSTEM DISC
0219 03300 002003 SZA,RSS IS THERE A JBIN
0220 03301 027341R JMP CKT99 NO: EXIT
0221 03302 001727 ALF,ALF YES
0222 03303 010074 AND B377

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0223 03304 003004 CMA,INA
0224 03305 043255R ADA CSAVE
0225 03306 002020 SSA IS TRACK IN JBIN?
0226 03307 027341R JMP CKT99 NO: EXIT
0227 03310 063261R LDA CKTRK
0228 03311 053260R CPA CKENT ENTRY FROM DISC PROCESSOR
0229 03312 027335R JMP CKT60 YES
0230 03313 064062 TBOMB LDB ,+7 GO TO PRINT 'TRAC TOO BIG'
0231 03314 063325R LDA BMSG
0232 03315 073256R STA TEMP1
0233 03316 077257R STB TEMP2 SAVE REG A & B IN CASE OF LISTING
0234 03317 016744R JSB ERRDG PRINT IT
0235 03320 002400 CLA
0236 03321 073455R STA DDFLG
0237 03322 073256R STA TRFLG
0238 03323 072770R STA EDITF DON'T ALLOW RETURN TO EDIT
0239 03324 026133R JMP PMS
0240 03325 003326R BMSG DEF ++1
0241 03326 052122 ASC 7,TRAC # TOO BIG
0242 03335 067474R CKT60 LDB CKJBS
0243 03336 057472R CPB PDISC ENTRY FROM JBIN?
0244 03337 002001 RSS YES
0245 03340 027313R JMP TBOMB NO
0246 03341 063255R CKT99 LDA CSAVE FIRST AVAILABLE TRACK
0247 03342 053265R CPA D203
0248 03343 027313R JMP TBOMB
0249 03344 127261R JMP CKTRK,I RETURN

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0251* *****
0252* * DIOP - READ OR WRITE CONTENTS OF *
0253* * 'BUFFER' FROM/TO THE SYSTEM BUF SEC *
0254* * ON ENTRY: A = SYS BUF T/S *
0255* * B = RDSYS/WRSYS *
0256* *****

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0258 03345 000000 DIOP NOP
0259 03346 077355R STB DIO SET FOR RDISC/WDISC
0260 03347 006404 CLB,INB
0261 03350 117355R JSB DIO,I READ OR WRITE SECTOR
0262 03351 006763R BFFAD DEF BUFFER TO 'BUFFER'
0263 03352 127345R JMP DIOP,I
0264*
0265 03353 003415R RDSYS DEF RDISC
0266 03354 003425R WRSYS DEF WDISC
0267 03355 003355R DIO DEF *

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0269* *****
0270* * ON ENTRY TO SYSB *
0271* * B = LOCN OF RDISC OR WDISC *
0272* *****

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0274 03356 000000 SYSB NOP
0275 03357 063477R LDA LUN2
0276 03360 073456R STA RWLUN SET TO READ SYSTEM DISC
0277 03361 060115 LDA UDIRT
0278 03362 017345R JSB DIOP DO THE READ OR WRITE
0279 03363 002700 CLA,CCE
0280 03364 067571R LDB EQPNT
0281 03365 127356R JMP SYSB,I EXIT
0282*
0283 03366 000000 LBLIO NOP B = RDSYS/WRSYS
0284 03367 060200 LDA DISCL SET TO READ USER LABEL SECTOR
0285 03370 017345R JSB DIOP
0286 03371 127366R JMP LBLIO,I

0288* *****
0289* * SETNX SETS NXTTS IN CORE AND ON *
0290* * USER BUFFER SECTOR *
0291* * ON ENTRY: A = T/S TO BE STORED *
0292* *****

0294 03372 000000 SETNX NOP
0295 03373 073356R STA SYSB SAVE T/S
0296 03374 067353R LDB RDSYS
0297 03375 017366R JSB LBLIO READ USER LABEL SECTOR
0298 03376 063356R LDA SYSB GET T/S
0299 03377 067414R LDB MTABL
0300 03400 016430R JSB EXSET STORE INTO NXTTS
0301 03401 077356R STB SYSB
0302 03402 073063R STA SNXTS
0303 03403 064155 LDB SYSSC
0304 03404 054161 CPB CUDSC SYST, SUBCHNL = USER SUBCHNL?
0305 03405 067413R LDB DISCB
0306 03406 057413R CPB DISCB
0307 03407 016430R JSB EXSET -YES, UPDATE SYS NXT T/S TOO
0308 03410 067354R LDB WRSYS
0309 03411 017366R JSB LBLIO WRITE UPDATED LBL SCTR
0310 03412 127372R JMP SETNX,I
0311 03413 000160 DISCB DEF SYSTS
0312 03414 000157 MTABL DEF NXTTS

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0315* *****
0316* * RDISC/WDISC = READ OR WRITE 'B' SECTORS OF *
0317* * INFORMATION FROM OR TO A DISC *
0318* * ENTRY = A = STARTING TRACK/SECTOR OF I/O *
0319* * B = NO. OF SECTORS TO BE PROCESSED*
0320* * L+1 = BUFFER ORIGIN
0321* * LINKAGE L JSB RDISC/WDISC *
0322* * L+1 BUFFER ORIGIN *
0323* * L+2 NORMAL RETURN *
0324* * AND LUN OF DISC RESET TO 3 *
0325* * (IF NO TRACKS ARE AVAILABLE JOB IS ABORTED)*
0326* *****
0327 03415 000000 RDISC NOP READ
0328 03416 073467R STA PTRAK SAVE TRK/SET
0329 03417 063415R LDA *-2 GET ENTRY ADDR
0330 03420 005722 BLF,RBL SECTOR COUNT X 128
0331 03421 005222 RBL,RBL
0332 03422 077473R STB MORSC SAVE SECTOR COUNT
0333 03423 064052 LDB ,-1 SET READ PARAM.
0334 03424 027434R JMP PDSC

0336 03425 000000 WDISC NOP WRITE
0337 03426 073467R STA PTRAK SAVE TRK/SECT
0338 03427 063425R LDA *-2 GET ENTRY ADDR
0339 03430 005722 BLF,RBL SECTOR COUNT X 128
0340 03431 005222 RBL,RBL
0341 03432 077473R STB MORSC SAVE SECTOR COUNT
0342 03433 064051 LDB ,-2 SET WRITE PARAM.
0343*
0344 03434 073472R PDSC STA PDISC SET SUBROUTINE ENTRY+1
0345 03435 077471R STB PCODE SAVE I/O MODE
0346 03436 037472R ISZ PDISC BUMP EXIT TO LINKAGE+2
0347 03437 160000 LDA A,I
0348 03440 073457R STA PBUFF SET BUFFER ORIGIN
0349 03441 063467R LDA PTRAK GET TRACK/SECTOR
0350* *****
0351 03442 010075 AND B1774 PICK UP HIGH 8 BITS
0352 03443 070001 STA B
0353 03444 005727 BLF,BLF RIGHT JUSTIFY
0354 03445 063467R LDA PTRAK GET TRACK/SECTOR
0355 03446 010074 AND B377 PICK UP LOW 8 BITS
0356* *****
0357 03447 077467R STB PTRAK
0358 03450 073470R STA PSECT
0359 03451 063467R LDA PTRAK
0360 03452 017261R JSB CKTRK IS TRACK TO BE USED IN TABLE?
0361 03453 016001X RETRY JSB EXEC
0362 03454 003463R DEF ++7
0363 03455 003471R DEF PCODE REQ. CODE=-1(READ) OR -2(WRITE)
0364 03456 003476R RWLUN DEF B103
0365 03457 000000 PBUFF NOP BUFFER ADDRESS
0366 03460 003473R DEF MORSC BUFFER WORD COUNT
0367 03461 003467R DEF PTRAK TRACK ORG.
0368 03462 003470R DEF PSECT SECTOR ORG.
0369 03463 063500R LDA LUN3
0370 03464 073456R STA RWLUN

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0371	03465	060174	LDA	TSONE	GET NEXT T/S
0372	03466	127472R	JMP	PDISC,1	RETURN
0374	03467	000000	PTRAK	BSS 1	TRACK ADDRESS
0375	03470	000000	PSECT	BSS 1	SECTOR ADDRESS
0376	03471	000000	PCODE	BSS 1	REQUEST CODE
0377	03472	000000	PDISC	BSS 1	SUBROUTINE JUMP ADDRESSES
0378	03473	000000	MORSC	BSS 1	BUFFER WORD COUNT
0379	03474	004432R	CKJBS	DEF RPRCX	ADDRESS OF RETURN TO JBIN STORE.
0380	03475	000102	B102	OCT 102	
0381	03476	000103	B103	OCT 103	
0382	03477	003475R	LUN2	DEF B102	
0383	03500	003476R	LUN3	DEF B103	

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0385* *****
0386* * DIRSR = SEARCH DIRECTORY FOR A GIVEN FILENAME *
0387* * INPUT: A = NUMBER OF CHARACTERS IN NAME. *
0388* * B = CHARACTER LOCATION OF THE NAME. *
0389* * (CHAR LOCN = ADDR. OF NAME OFFSET 1 BIT TO THE *
0390* * LEFT) LOWEST BIT OF LOCN IS UPPER/LOWER *
0391* * START POSITION = 0=UPPER, 1=LOWER) *
0392* * 2ND WORD OF LINKAGE = TRACK/SECTOR OF DIRCTRY*
0393* * 3RD WORD OF LINKAGE IS THE RETURN. *
0394* * OUTPUT: A = MEMORY LOCN OF ENTRY (0=NOT FOUND)*
0395* * B = TRACK/SECTOR CONTAINING ENTRY *
0396* *
0397* * DIRECTORY ENTRY FORMAT *
0398* *
0399* *****
0400* * WORD 1 * 1ST 2 CHARACTERS OF FILENAME *
0401* * *****
0402* * WORD 2 * NEXT 2 CHARACTERS OF FILENAME *
0403* * *****
0404* * WORD 3 * LAST CHARACTER *P* TYPE *
0405* * *****
0406* * WORD 4 * STARTING TRACK * STARTING SECTOR *
0407* * *****
0408* * WORD 5 * FILE LENGTH (IN SECTORS) *
0409* * *****
0410* * WORD 6 * FWA OF THE PROGRAM *
0411* * *****
0412* * WORD 7 * LWA OF THE PROGRAM *
0413* * *****
0414* * WORD 8 * FWA OF THE BASE PAGE LINKAGE AREA *
0415* * *****
0416* * WORD 9 * LWA OF THE BASE PAGE LINKAGE AREA *
0417* * *****
0418* * WORD 10 * PROGRAM ENTRY POINT *
0419* * *****
0420* * WORD 11 * FWA OF THE LIBRARY ROUTINE AREA *
0421* * *****
0422* *
0423* * WORDS 6 THRU 11 ARE PRESENT FOR SYSTEM *
0424* * GENERATED PROGRAMS ONLY(TYPES 0 THRU 6) *
0425* * IF P(IN WORD 3)=1, PURGE.(SYS GEN USER ONLY). *
0426* *
0427* * TYPE CODE(OCTAL) PROGRAM TYPE *
0428* *
0429* * 0 SYSTEM RESIDENT *
0430* * 1 DISC RES.EXEC.SUPERV.MODULE *
0431* * 2 RESERVED FOR SYSTEM *
0432* * 3 USER PROGRAM, MAIN *
0433* * 4 DISC RESIDENT DEVICE DRIVER *
0434* * 5 USER PROGRAM, SEGMENT *
0435* * 6 LIBRARY *
0436* * 10 RELOCATABLE BINARY PROGRAM *
0437* * 11 ASCII SOURCE STATEMENTS *
0438* * 12 BINARY DATA *
0439* * 13 ASCII DATA *
0440* * 14 ABSOLUTE BINARY PROGRAM *

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0441*

0443	03501	000000	DIRSR	NOP	
0444	03502	073565R		STA MLOCN	SAVE TYPE/CHAR COUNT
0445	03503	077521R		STB DMOVE	SET ORIGIN ADDR OF FILENAME
0446	03504	067374R		LDB BLNKS	SET DESTINATION TO BLANKS
0447	03505	077570R		STB NMBUF	
0448	03506	077571R		STB NMBUF+1	
0449	03507	066512R		LDB B20K	BLNK UPPER
0450	03510	077572R		STB NMBUF+2	
0451	03511	001665		ELA,CLE,ERA	CLEAR SIGN IN CASE IT'S NUMERIC
0452	03512	064000		LDB A	
0453	03513	044045		ADB .-6	
0454	03514	006021		SSB,RSS	MORE THAN 5 CHARS.?
0455	03515	060060		LDA .+5	YES, SET COUNT=5
0456	03516	067567R		LDB NMBUF-1	DESTINATION CHARPOS
0457	03517	005200		RBL	
0458	03520	017003R		JSB MOVE	
0459	03521	000000	DMOVE	NOP	ORIGIN OF NAME
0460	03522	063570R		LDA NMBUF	
0461	03523	010075		AND B1774	
0462	03524	053602R		CPA ULPAR	
0463	03525	027761R		JMP FNILL	
0464	03526	063565R		LDA MLOCN	GET WORD WITH TYPE BIT IN IT
0465	03527	002020		SSA	IS IT AN ALPHA NAME?
0466	03530	027761R		JMP FNILL	NO - IT'S ILLEGAL
0467	03531	163501R		LDA DIRSR,I	GET TRK/SECTOR OF DIRECTORY
0468	03532	160000		LDA A,I	TRK/SECTOR NOW IN 'A'
0469	03533	017624R		JSB READ1	INIT CURTS,MLOCN AND READ SECT 1
0470	03534	002001		RSS	
0471	03535	017603R	DRSR2	JSB GETNX	
0472	03536	163565R		LDA MLOCN,I	
0473	03537	002003		SZA,RSS	END OF TABLE?
0474	03540	027561R		JMP DRSRX	YES - GO TO EXIT
0475	03541	053570R		CPA NMBUF	NO - CHECK THE NAME
0476	03542	002001		RSS	1ST CHARS ARE SAME
0477	03543	027535R		JMP DRSR2	MISMATCH, GET NEXT ENTRY
0478	03544	067565R		LDB MLOCN	
0479	03545	006004		INB	
0480	03546	160001		LDA B,I	GET 2ND 2 CHARACTERS
0481	03547	053571R		CPA NMBUF+1	
0482	03550	002001		RSS	THEY CHECK
0483	03551	027535R		JMP DRSR2	
0484	03552	006004		INB	
0485	03553	160001		LDA B,I	GET LAST CHARACTER
0486	03554	010075		AND B1774	MASK OUT LOWER 1/2 WORD
0487	03555	053572R		CPA NMBUF+2	
0488	03556	002001		RSS	THE NAME IS FOUND
0489	03557	027535R		JMP DRSR2	
0490	03560	063565R		LDA MLOCN	
0491	03561	067566R	DRSRX	LDB CURTS	
0492	03562	044052		ADB .-1	SET B=TRK/SECTOR OF NAME
0493	03563	037501R		ISZ DIRSR	
0494	03564	127501R		JMP DIRSR,I	EXIT HERE
0496	03565	000000	MLOCN	NOP	MEMORY LOCATION POINTER

0001	03566	000000	CURTS	NOP	TRACK/SECTOR OF ENTRY
0002	03567	003570R		DEF **1	
0003	03570	000000	NMBUF	BSS 3	NAME BUFFER
0004	03573	052516		ASC 5,UNDEFINED.	
0005	03600	000000	TEMP	NOP	
0006	03601	010546R	DICND	DEF DICBF+128	END OF DICTIONARY BUFFER
0007	03602	024000	ULPAR	OCT 024000	

```

0009*
0010*
0011*
0012*
0013*
0014*
0015*
*****
* GETNX = GET NEXT ENTRY IN A DICTIONARY *
* ENTRY: MLOCN PNTS TO CURR DICBF ENTRY *
* CURTS CONTAINS TRK/SECTR OF ENTRY *
* EXIT: MLOCN PNTS TO NEW DICBF ENTRY *
* CURTS CONTAINS TRK/SECT OF NEW ENT*
*****
0016 03603 000000 GETNX NOP
0017 03604 017632R JSB CMPNX COMPUTE NEW ENTRY LOCN
0018 03605 127603R JMP GETNX,I L+1 = ENTRY IN SAME SECTOR
0019 03606 063566R LDA CURTS L+2 = ENTRY IN NEXT SECTOR
0020 03607 010074 AND B377
0021 03610 072346R STA DICBF (IF END OF DICT TRK, DICBF=0)
0022 03611 002003 SZA,RSS END OF DICT.?
0023 03612 127603R JMP GETNX,I YES = RETURN
0024 03613 063566R LDA CURTS
0025 03614 067623R GETEX LDB FLUN
0026 03615 077456R STB RWLUN SET PROPER LUN
0027 03616 006404 CLB,INB
0028 03617 017415R JSB RDISC READ NEXT SECTOR
0029 03620 010346R DICAD DEF DICBF
0030 03621 073566R STA CURTS
0031 03622 127603R JMP GETNX,I
0032 03623 003476R FLUN DEF B103
0033*
0034*
*****
* READ1 = SET UP TO READ 1ST ENTRY FROM *
* A DICTIONARY(USER OR SYSTEM). *
* A = TRK/SECTOR OF DICTIONARY *
* MLOCN IS INITIALIZED TO DICAD *
* CURTS IS TRK/SECTOR OF 1ST SECTOR *
*****
0041 03624 000000 READ1 NOP
0042 03625 067620R LDB DICAD
0043 03626 077565R STB MLOCN MLOCN = L(DICBF)
0044 03627 067624R LDB READ1
0045 03630 077603R STB GETNX
0046 03631 027614R JMP GETEX
0047*
0048*
*****
* CMPNX = COMPUTE LOCATION OF NEXT ENTRY IN DICBF *
* L+1 EXIT = NEXT ENTRY IN SAME SECTOR *
* L+2 EXIT = NEXT ENTRY IN NEXT SECTOR(GET ONE!) *
* MLOCN = NEW LOC. OF NEXT ENTRY(EVEN IF NEW SC.)*
* ---THE NEW SECTOR HAS NOT BEEN READ--- *
*****
0055 03632 000000 CMPNX NOP
0056 03633 063565R LDA MLOCN
0057 03634 017402R JSB DRADD COMPUTE ENTRY LENGTH
0058 03635 047565R ADB MLOCN
0059 03636 077565R STB MLOCN
0060 03637 163565R LDA MLOCN,I
0061 03640 057601R CPB DICND IS MLOCN=END DICBF?
0062 03641 002001 RSS YES = NEW SECTOR NEEDED
0063 03642 050052 CPA,-1 IS LAST ENTRY IN SECTOR DONE?
0064 03643 002001 RSS YES = NEW SECTOR NEEDED

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0065 03644 127632R      JMP CMPNX,I      L+1 EXIT,NO NEW SECTOR;A=MLOCN,I
0066 03645 037632R      ISZ CMPNX
0067 03646 063620R      LDA DICAD
0068 03647 073565R      STA MLOCN
0069 03650 127632R      JMP CMPNX,I      L+2 EXIT, NEW SECTOR NEEDED
0070*
0071*
0072*
0073*
0074*
0075*
0076*
0077*
0078 03651 000000      USERD NOP
0079 03652 037232R      ISZ PMLOC
0080 03653 063232R      LDA PMLOC
0081 03654 017714R      JSB NXSET
0082 03655 167232R      USRD1 LDB PMLOC,I
0083 03656 006003      SZB,RSS      IS A PARAMETER THERE?
0084 03657 127651R      JMP USERD,I      NO - TAKE L+1 EXIT
0085 03660 063500R      LDA LUN3
0086 03661 073623R      STA FLUN
0087 03662 017625R      JSB PMNXT
0088 03663 017501R      JSB DIRSR      GO SEARCH USER DIRECTORY
0089 03664 000773R      DEF USDIR
0090 03665 002103      CLE,SZA,RSS
0091 03666 027677R      JMP USRD2
0092*
0093 03667 073236R      STA JSRCH
0094 03670 060161      LDA CUDSC
0095 03671 053456R      CPA SAVSC      SUBCHNL CHANGED?
0096 03672 027674R      JMP USRDX      -NO, EXIT
0097 03673 016010R      JSB RPTSC
0098 03674 063236R      USRDX LDA JSRCH
0099 03675 037651R      ISZ USERD
0100 03676 127651R      JMP USERD,I
0101*
0102 03677 017725R      USRD2 JSB NXTSC      GET NEXT SUBCHNL TO SRCH
0103 03700 027704R      JMP NOMOR      -ALL DONE - FILE NOT FOUND
0104 03701 063760R      LDA SAVPM
0105 03702 073232R      STA PMLOC
0106 03703 027655R      JMP USRD1      GO SEARCH NEXT DIRECTORY
0107*
0108 03704 017441R      NOMOR JSB RESET
0109 03705 063760R      LDA SAVPM
0110 03706 164000      LDB A,I
0111 03707 002004      INA
0112 03710 160000      B160K LDA A,I
0113 03711 017501R      JSB DIRSR      RESTORE CURRENT USER
0114 03712 000773R      DEF USDIR      DISC DIRECTORY
0115 03713 027675R      JMP USRDX+1
0116*
0117 03714 000000      NXSET NOP
0118 03715 073760R      STA SAVPM      SAVE FILE-NAME ADDRESS
0119 03716 007400      CCB
0120 03717 076200R      STB SCHNL

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0121	03720	064331	LDB	SSFLG	
0122	03721	076254R	STB	JSFLG	
0123	03722	064161	LDB	CUDSC	
0124	03723	077456R	STB	SAVSC	SAVE CURRENT USER SUBCHNL
0125	03724	127714R	JMP	NXSET,I	
0126*					
0127	03725	000000	NXTSC	NOP	
0128	03726	062254R	LDA	JSFLG	
0129	03727	052371R	CPA	AND	:SS ALLOWED?
0130	03730	127725R	JMP	NXTSC,I	-NO, EXIT
0131	03731	002003	SZA	RSS	:SS FLAG SET FOR SEARCH?
0132	03732	127725R	JMP	NXTSC,I	-NO
0133	03733	002020	SSA		SEARCH ALL SUBCHNL8?
0134	03734	027744R	JMP	ALLSC	-YES
0135	03735	036200R	NXINC	ISZ	SCHNL
0136	03736	000000	NOP		
0137	03737	000031	SLA	ARS	
0138	03740	002001	RSS		
0139	03741	027735R	JMP	NXINC	
0140	03742	072254R	STA	JSFLG	
0141	03743	027747R	JMP	SETSC	
0142*					
0143	03744	003000	ALLSC	CMA	
0144	03745	072200R	STA	SCHNL	
0145	03746	036254R	ISZ	JSFLG	
0146*					
0147	03747	062200R	SETSC	LDA	SCHNL
0148	03750	053456R	CPA	SAVSC	
0149	03751	027726R	JMP	NXTSC+1	
0150	03752	006404	CLB	INB	
0151	03753	016162R	JSB	JEXUD	MAKE PRIVILEGED SEX17 CALL
0152	03754	002002	SZA		
0153	03755	027726R	JMP	NXTSC+1	-YES, GO CHECK NEXT ONE
0154	03756	037725R	ISZ	NXTSC	
0155	03757	127725R	JMP	NXTSC,I	
0156*					
0157	03760	000000	SAVPM	NOP	
0158*					
0159*					
0160*					
0161*					
0162	03761	063567R	FNILL	LDA	NMBUF-1 GET ORIGIN OF CURRENT NAME
0163	03762	064056	LDB	,+3	
0164	03763	016744R	JSB	ERRDG	GO PRINT THE ILLEGAL NAME
0165	03764	064057	LDB	,+4	
0166	03765	062000R	LDA	FNILM	
0167	03766	073256R	STA	TEMP1	
0168	03767	077257R	STB	TEMP2	SAVE A & B IN CASE OF ERR.MESS.LI
0169	03770	016744R	JSB	ERRDG	
0170	03771	063172R	LDA	PMCNT+1	GET DIRECTIVE
0171	03772	053165R	CPA	CHARS+20	WAS IT A PURGE?
0172	03773	026005R	JMP	DELET	YES, GO BACK TO PURGE PROC.
0173	03774	063455R	LDA	DOFLG	
0174	03775	002002	SZA		DISC DUMP IN PROCESS?
0175	03776	027257R	JMP	DCULP	-YES, GO BACK TO DUMP
0176	03777	026133R	JMP	PMS	

PAGE 0054 #05 DICTIONARY(I,E, DIRECTORY) PROCESSORS

0177 04000 004001R FNILM DEF **1
0178 04001 044514 ASC 4,ILLEGAL

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0180* *****
0181* * PURGE = DELETE GIVEN FILE NAMES FROM *
0182* * THE 'USER' DICTIONARY. AFTER *
0183* * ALL NAMES ARE DELETED A PURGE *
0184* * OF THE USER FILE IS EXECUTED. *
0185* *****
0186 04005 017651R DELET JSB USERD GET A FILENAME
0187 04006 026026R JMP DEL30-1 NO NAME
0188 04007 073565R DEL10 STA MLOCN IF A#0 MLOCN IS CLEARED
0189 04010 002102 CLE, SZA WAS IT FOUND?
0190 04011 026016R JMP DEL20 YES
0191 04012 017117R JSB FNUND NO; GO TO 'FILENAME UNDEF.'
0192 04013 017651R DEL15 JSB USERD
0193 04014 026027R JMP DEL30
0194 04015 026007R JMP DEL10
0195*
0196 04016 063567R DEL20 LDA NMBUF-1
0197 04017 064056 LDB ,+3
0198 04020 016744R JSB ERRDG PRINT FILE NAME
0199 04021 163565R LDA MLOCN, I CLEAR LOWER 1/2 OF 1ST WORD
0200 04022 010075 AND B1774 OF FILENAME TO BE DELETED
0201 04023 173565R STA MLOCN, I
0202 04024 016034R JSB WSECT WRITE SECTOR BACK
0203 04025 026013R JMP DEL15 GO FOR NEXT NAME
0204*
0205 04026 002405 CLA, INA, RSS
0206 04027 002400 DEL30 CLA
0207 04030 017714R JSB NXSET
0208 04031 006400 CLB
0209 04032 017706R JSB PURGE PURGE DELETED FILES
0210 04033 026311R JMP RNS RETURN TO CONTROL STATE, READER
0211*
0212* *****
0213* * WRITE SECTOR BACK INTO DICTIONARY *
0214* *****
0215 04034 000000 WSECT NOP
0216 04035 063566R LDA CURTS GET TRACK/SECTOR FOR CURR. SECTO
0217 04036 010074 AND B377 CHECK IF ON TRACK BOUNDARY
0218 04037 002003 SZA, RSS SECTOR 0?
0219 04040 026050R JMP SEC0 = YES
0220 04041 063566R LDA CURTS
0221 04042 040052 WS1 ADA ,=1 REDUCE 1 SEC TO GET CURRENT SECT
0222 04043 006404 CLB, INB B = WRITE 1 SECTOR
0223 04044 017425R JSB WDISC
0224 04045 010346R DEF DICBF BUFFER ORIGIN
0225 04046 073566R STA CURTS SAVE TRK/SECT FOR NEXT WRITE
0226 04047 126034R JMP WSECT, I RETURN
0227 04050 063566R SEC0 LDA CURTS
0228 04051 042054R ADA MITRK MINUS 1 TRACK
0229 04052 040116 ADA SECTR COMBINE LAST SEC#+1
0230 04053 026042R JMP WS1
0231 04054 177400 MITRK OCT -400

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0233*      *      *****
0234*      *      * STORE INFORMATION INTO THE DISC USER FILE *
0235*      *      * 'A': RESERVE 'N' SECTORS FOR ASCIT DATA *
0236*      *      * 'B': RESERVE 'N' SECTORS FOR BINARY DATA *
0237*      *      * 'S': STORE SOURCE FILE FROM INDICATED LUN *
0238*      *      * 'R': STORE REL.BIN.PROGS FROM JBIN OR LUN *
0239*      *      * 'P': STORE SYS.GENER. PROGS FROM JBIN *
0240*      *      * 'X': STORE ABS. BIN. PROGS FROM LUN *
0241*      *      *****
0242 04055 006400 STORE CLB CLEAR COLON FLAG FOR 1ST,S
0243 04056 076520R STB COLF
0244 04057 076752R STB ABINF CLEAR ABS. BINARY FLAG
0245 04060 017774R JSB TYPES GET TYPE OF STORE
0246 04061 067171R LDB PMCNT
0247 04062 054054 CPB ,+1 1 PARAMETER?
0248 04063 026524R JMP STORP YES - GO TO STORE ALL
0249 04064 017651R STOR1 JSB USERD SEARCH FOR A FILENAME
0250 04065 026311R JMP RNS NO MORE PRESENT
0251 04066 066757R LDB CTEST GET STORE TYPE
0252 04067 002003 SZA,RSS WAS A NAME FOUND?
0253 04070 026111R JMP STOR3 NO -
0254 04071 056513R CPB B120 YES, IS STORE TYPE = P?
0255 04072 026107R JMP STOR2 YES - OK
0256 04073 062075R NMDUP LDA STERR NO - 'DUPLICATE NAME'
0257 04074 026127R JMP PMISS+1
0258 04075 004076R STERR DEF ++1
0259 04076 042125 ASC 9,DUPLICATE FILENAME
0260*
0261 04107 017131R STOR2 JSB PCHEK CLEAR 'P' AND WRITE BACK TO DICT
0262 04110 026064R JMP STOR1
0263*
0264 04111 056513R STOR3 CPB B120 IS THIS P STORE?
0265 04112 002101 CLE,RSS -YES - ERROR 'UNDEFINED PROGRAM'
0266 04113 026116R JMP STOR4
0267 04114 017117R JSB FNUND PRINT 'UNDEF. FILENAME'
0268 04115 026064R JMP STOR1 GO GET NEXT FILENAME
0269*
0270 04116 016515R STOR4 JSB ASCDC PICK UP LUN OR SECTOR COUNT
0271 04117 066757R LDB CTEST NO PARAMETER EXIT (A=0)
0272 04120 002002 SZA IS NUMBER=0? (B=-10 ON EXIT)
0273 04121 026222R JMP STOR5 NO
0274 04122 054041 CPB , -10 YES, WAS EXIT NORMAL?
0275 04123 026741R JMP PILLG YES - JUMP TO 'ILLEG.PARAM'
0276 04124 056516R CPB B122 IS THIS TYPE R?
0277 04125 026222R JMP STOR5 YES, OK
0278 04126 062142R PMISS LDA SSIMP
0279 04127 064064 LDB ,+9
0280 04130 073256R STA TEMP1 SAVE A & B IN CASE OF ERR MESS LI
0281 04131 077257R STB TEMP2
0282 04132 016744R JSB ERRDG PRINT ERR MESS ON TTY
0283 04133 016203R PMS JSB ERMES PRINT OUT ERROR MESSAGES
0284 04134 002001 RSS KEYBOARD MODE
0285 04135 026450R JMP EJOBX+1 BATCH ABORT
0286*
0287 04136 062165R RNSY LDA REREQ
0288 04137 067575R LDB D13

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0289 04140 016744R JSB ERRDG PRINT 'RE-ENTER REQUEST'
0290 04141 026311R JMP RNS GO GET NEXT STATEMENT
0291 04142 004143R SSIMP DEF **1
0292 04143 046511 ASC 9,MISSING PARAMETER
0293 04154 044514 ASC 9,ILLEGAL PROG. TYPE ('PR' AT SSIMP+14..)
0294 04165 004166R REREQ DEF **1
0295 04166 051105 ASC 13,RE-ENTER STATEMENT ON TTY.
0296*
0297*
0298***** IF KEYBOARD MODE, RETURN TO P+1.
0299* IF BATCH MODE, PRINT THE ERRONEOUS DIRECTIVE & ERROR
0300* MESSAGE ON THE STANDARD LIST DEVICE AND RETURN TO P+2.
0301*
0302 04203 000000 ERMES NOP
0303 04204 060111 LDA BATCH
0304 04205 050112 CPA SYSTY KEYBOARD MODE?
0305 04206 126203R JMP ERMES,I YES, RETURN TO P+1
0306 04207 060061 LDA .+6 NO, LIST ERRONEOUS INPUT STATEM
0307 04210 072213R STA LSTLN
0308 04211 060123 LDA JBUFF
0309 04212 066221R LDB SAVL
0310 04213 016256R JSB LSTIO
0311 04214 063256R LDA TEMP1 LIST ERROR MESSAGE ON LIST
0312 04215 067257R LDB TEMP2
0313 04216 016256R JSB LSTIO
0314 04217 036203R ISZ ERMES RETURN TO P+2
0315 04220 126203R JMP ERMES,I
0316 04221 000000 SAVL NOP LENGTH OF INPUT STAT IN JBUFF
0317*
0318*
0319 04222 072014R STOR5 STA ENTLN SET LUN OR SECTOR COUNT
0320 04223 066757R LDB CTEST
0321 04224 060063 LDA .+10B
0322 04225 056516R CPB B122 TYPE R?
0323 04226 026243R JMP STOR6
0324 04227 002004 INA NO
0325 04230 057730R CPB B123 TYPE S?
0326 04231 026243R JMP STOR6
0327 04232 002004 INA NO
0328 04233 057475R CPB B102 TYPE = 'B'?
0329 04234 026243R JMP STOR6
0330 04235 002004 INA
0331 04236 056512R CPB B101 TYPE A?
0332 04237 026243R JMP STOR6
0333 04240 057541R CPB B130 TYPE X?
0334 04241 002005 INA,RSS
0335 04242 026741R JMP PILLG NO = 'ILLEG.PARAM.' EXIT
0336 04243 072764R STOR6 STA ENTYP SET ENTRY TYPE
0337 04244 067565R LDB MLOCN SAVE DICT. POINTER(MLOCN)
0338 04245 076773R STB SAVML
0339 04246 064157 LDB NXTTS GET NEXT TRK/SECTOR IN USER FILE
0340 04247 076765R STB ENTSC STORE IT
0341 04250 076766R STB NEWTS
0342 04251 052521R CPA B14 TYPE X?
0343 04252 026256R JMP STOR7
0344 04253 040041 ADA .+12B

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0345	04254	002021	SSA,RSS	TYPE 'A' OR 'B'?
0346	04255	026750R	JMP STRAB	YES, GO TO CORRESP. ROUTINE
0347	04256	062014R	STOR7 LDA ENTLN	
0348	04257	072771R	STA INLUN	SET CONTROL WORD FOR INPUT
0349	04260	073647R	STA SAVEA	
0350	04261	017634R	JSB NULCK	LUN NULL?
0351	04262	026311R	JMP RNS	YES, RETURN
0352	04263	062771R	LDA INLUN	RESTORE A REG. FOR EOTST.
0353	04264	016751R	JSB EOTST	GO SET EOT STATUS IN CASE NEEDED
0354	04265	066757R	LDB CTEST	SET B = TYPE
0355	04266	062761R	LDA MINBF	
0356	04267	073565R	STA MLOCN	MLOCN = L(INBUF-1)
0357	04270	002400	CLA	
0358	04271	072014R	STA ENTLN	ENTLN=0
0359	04272	072760R	STA CDCNT	CLEAR STATEMENT COUNTER
0360	04273	057541R	CPB B130	TYPE X?
0361	04274	026675R	JMP STORX	
0362	04275	057730R	CPB B123	TYPE S?
0363	04276	026645R	JMP SPROC	YES
0364*				
0365*				
0366*				
0367*				
0368*				

* STORE RELOCATABLE PROGRAMS TO USER FILE *				

0369	04277	062771R	LDA INLUN	
0370	04300	002003	SZA,RSS	ARE PROGRAMS FROM A LOGICAL UNIT
0371	04301	026376R	JMP RPRCJ	NO - THEY'RE FROM THE JBIN AREA
0372	04302	042515R	ADA B300	
0373	04303	072771R	STA INLUN	SET CONTROL WORD FOR REL. BINRN.
0374	04304	002404	CLA,INA	
0375	04305	072751R	STA RBINF	SET 'RELOC.BIN.' FLAG FOR DISCW
0376	04306	062517R	STORR LDA D60	FOR 60 WORD READ
0377	04307	067351R	LDB BFFAD	B= BUFFER ADDRESS
0378	04310	017145R	JSB STORD	GO READ A RECORD
0379	04311	026361R	JMP RPRC4	END OF TAPE EXIT.
0380*				

0381	04312	044050	ADB .-3	ON EXIT B=NO, OF WORDS IN RECORD
0382	04313	007004	CMB,INB	
0383	04314	077600R	STB TEMP	
0384	04315	062765R	LDA BUFFER+2	
0385	04316	003004	CMA,INA	A = -(CHECKSUM)
0386	04317	042764R	ADA BUFFER+1	ADD 'RECORD TYPE'
0387	04320	067351R	LDB BFFAD	
0388	04321	044056	ADB .+3	B = LOCN OF 1ST WORD AFTER CKSUM
0389	04322	140001	ADA B,I	ADD IN REST OF RECORD
0390	04323	006004	INB	
0391	04324	037600R	ISZ TEMP	DONE?
0392	04325	026322R	JMP *-3	NO - ADD IN NEXT.
0393	04326	002003	SZA,RSS	CHECKSUM OK?
0394	04327	026343R	JMP RPRC2	YES
0395	04330	064062	STRR2 LDB .+7	
0396	04331	062333R	LDA .+2	
0397	04332	026130R	JMP PMISS+2	
0398	04333	004334R	DEF .+1	
0399	04334	041510	ASC 7,CHECKSUM ERROR	
0400	04343	017272R	RPRC2 JSB DISCW	GO STORE A RECORD TO THE FILE.

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0401* *****
0402 04344 062764R LDA BUFFR+1
0403 04345 013710R AND B160K B160000
0404 04346 072762R STA BUFFR-1 SAVE VALUE OF RECORD TYPE
0405 04347 052514R CPA B120K END RECD WRITTEN (B120000)
0406 04350 002001 RSS YES
0407 04351 026306R JMP STORR NO - GO GET AND WRITE NEXT REC.
0408 04352 063565R RPRC3 LDA MLOCN
0409 04353 052762R CPA INB63 MLOCN AT END OF INBUF(+63)?
0410 04354 026306R JMP STORR YES - START NEXT PROGRAM
0411 04355 017322R JSB DWRD NO, CONTINUE SETTING ZEROS
0412 04356 002400 CLA
0413 04357 173565R STA MLOCN,I
0414 04360 026362R JMP RPRC3 GO CHECK FOR SECTOR END
0415 04361 017322R RPRC4 JSB DWRD BUMP MLOCN
0416 04362 062762R LDA BUFFR-1
0417 04363 052514R CPA B120K END COMPLETED?(B120000)
0418 04364 026753R JMP XSTOR YES - GO TO EXIT PROCESSING
0419 04366 064060 LDB .+6 NO
0420 04366 062370R LDA ++2
0421 04367 026130R JMP PMISS+2
0422 04370 004371R DEF ++1
0423 04371 047117 AND ASC 5,NO BIN END
0424*
0425 04376 060101 RPRCJ LDA JBINS READ PROGRAM(S) FROM JBIN AREA
0426 04377 050052 CPA .-1 JBIN OVERFLOW?
0427 04400 026446R JMP RPRJB YES, ABORT
0428 04401 072757R STA CTEST SET START OF READ AREA
0429 04402 002003 SZA,RSS IS JBIN AREA RESERVED?
0430 04403 026126R JMP PMISS PARAM,MISSING(LOG,UNIT NO,)ERROR
0431 04404 050102 CPA JBINC WAS ANY BINARY EMITTED?
0432 04405 026126R JMP PMISS NO, PARAMETER MISSING
0433 04406 003004 CMA,INA
0434 04407 040102 ADA JBINC JBINC=JBINS IN A
0435 04410 006400 CLB A(U)*NO.OF TRKS;A(L)*NO.OF SECT.
0436* *****
0437 04411 016436R JSB .,RRL
0438 04412 177750 DEC #24
0439* *****
0440 04413 005727 BLF,BLF POSITION SECTORS LEFT IN B
0441 04414 002003 SZA,RSS FIRST JBIN TRACK ONLY?
0442 04415 026422R JMP ++6 YES
0443 04416 040075 ADA B1774 MAKE A A NEG, VALUE
0444 04417 044116 ADB SECTR ADD A SET OF SECTORS(A TRACKFUL)
0445 04420 034000 ISZ A ANOTHER TRACK?
0446 04421 026417R JMP *-2 YES, GO BACK FOR ANOTHER BUMP
0447 04422 007004 CMB,INB
0448 04423 076772R STB ENDFL B#=(TOTAL # OF SECTORS IN JBIN)
0449 04424 062757R RPRC7 LDA CTEST
0450 04425 067477R LDB LUN2
0451 04426 077456R STB RWLUN SET DISC = LUN2
0452 04427 006404 CLB,INB
0453 04430 017415R JSB RDISC
0454 04431 011375R DEF INBUF
0455 04432 072757R RPRCX STA CTEST SAVE NEXT T/S
0456 04433 006400 CLB

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0457* *****
0458 04434 016436R JSB ,.RRL
0459 04435 177750 DEC =24
0460* *****
0461 04436 006003 SZB,RSS START OF A NEW TRACK?
0462 04437 026502R JMP RPRC0 YES
0463 04440 016741R RPRC8 JSB NUSET
0464 04441 036014R ISZ ENTLN BUMP THE ENTRY SECTOR COUNT
0465 04442 036772R ISZ ENDFL LAST SECTOR TRANSMITTED?
0466 04443 026424R JMP RPRC7 NO
0467 04444 026753R JMP XSTOR YES GO SET UP DICT. ENTRY
0468*
0469 04445 062475R RPRJB LDA JBINV
0470 04446 064057 LDB ,+4
0471 04447 016744R EJ0BX JSB ERRDG PRINT DIAGNOSTIC
0472 04450 064061 LDB ,+6
0473 04451 062466R LDA JBAB
0474 04452 073256R STA TEMP1
0475 04453 077257R STB TEMP2 SAVE A & B IN CASE LISTING MESS
0476 04454 016744R JSB ERRDG ON LIST DEV. IF IN BATCH MODE
0477 04455 060111 LDA BATCH
0478 04456 050112 CPA SYSTY
0479 04457 026116R JMP EJ0B+3 IF IN KEYBOARD MODE,DON'T LIST.
0480 04460 063256R LDA TEMP1
0481 04461 067257R LDB TEMP2
0482 04462 016256R JSB LSTIO
0483 04463 002404 CLA,INA SET BATCH ABORT FLAG.
0484 04464 073244R STA ABFL
0485 04465 026311R JMP RNS
0486 04466 004467R JBAB DEF ++1
0487 04467 045117 ASC 6,JOB ABORTED!
0488 04475 004476R JBINV DEF ++1
0489 04476 045102 ASC 4,JBIN OVF
0490 04502 040051 RPRC0 ADA ,=2 GET NEXT LOWER TRACK
0491 04503 001727 ALF,ALF REPOSITION THE TRACK NO.
0492 04504 072757R STA CTEST AND STORE IT
0493 04505 026440R JMP RPRC8 RETURN TO PROCESSING
0494*
0495 04506 060111 ABORT LDA BATCH ***** KEYBOARD MODE ONLY *****
0496 04507 050112 CPA SYSTY
0497 04510 026450R JMP EJ0BX+1
0498 04511 026711R JMP IGNOR
0499 04512 000101 B101 OCT 101
0500 04513 000120 B120 OCT 120
0501 04514 120000 B120K OCT 120000
0502 04515 000300 B300 OCT 300 3008
0503 04516 000122 B122 OCT 122
0504 04517 000074 D60 DEC 60
0505 04520 000000 COLF NOP
0506 04521 000014 B14 OCT 14
0507 04522 002300 B2300 OCT 2300
0508 04523 041400 B414 OCT 41400 CHAR C

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0510*
0511*
0512*
0513*
0514 04524 052513R STORP CPA B120 P?
0515 04525 002001 RSS YES
0516 04526 026126R JMP PMISS NO - "MISSING PARAMETER"
0517 04527 017714R JSB NXSET
0518 04530 062773R STRP0 LDA USDIR
0519 04531 017624R JSB READ1 INIT CURTS/MLOCN; READ SECTR 1.
0520 04532 163565R STRP1 LDA MLOCN,I
0521 04533 002003 SZA,RSS END OF DICTIONARY?
0522 04534 026540R JMP STRP2 -YES
0523 04535 017131R JSB PCHEK CHECK 'P' BIT
0524 04536 017603R JSB GETNX GET NEXT ENTRY
0525 04537 026532R JMP STRP1
0526 04540 017725R STRP2 JSB NXTSC
0527 04541 002001 RSS
0528 04542 026530R JMP STRP0
0529 04543 017441R JSB RESET
0530 04544 026311R JMP RNS

0531*
0532*
0533*
0534*
0535*
0536*
0537*
0538*
0539*
0540 04545 037232R SPROC ISZ PMLOC
0541 04546 063232R LDA PMLOC SEE IF MORE PARAM
0542 04547 002004 INA
0543 04550 160000 LDA A,I LAST WORD IN PARAM. TAB.
0544 04551 002003 SZA,RSS END?
0545 04552 026570R JMP SPR,1 YES, CONTINUE
0546 04553 017774R JSB TYPE8 GET NEXT PARAM.
0547 04554 001727 ALF,ALF LEFT JUSTIFIED
0548 04555 052523R CPA B414 CHAR. C?
0549 04556 002001 RSS
0550 04557 026741R JMP PILLG NO, ILLEGAL PARAM.
0551 04560 062771R LDA INLUN INPUT LUN =BATCH LUN?
0552 04561 010072 AND B77 GET LUN ONLY
0553 04562 050112 CPA SYSTY
0554 04563 026566R JMP ++3
0555 04564 050111 CPA BATCH INPUT LUN =BATCH LUN?
0556 04565 027562R JMP LUCH3 YES, ILLEGAL
0557 04566 006404 CLB,INB SET FLAG
0558 04567 076520R STB COLF
0559 04570 062643R SPR,1 LDA BELLS
0560 04571 066771R LDB INLUN
0561 04572 007000 CMB
0562 04573 054051 CPB --2
0563 04574 016744R JSB ERRDG
0564 04575 067351R SPRC1 LDB BFFAD SET BUFFER=BUFFER
0565 04576 063325R LDA D40 JO INPUT 80 CHARS.

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0566	04577	017145R	JSB STORD	(ON EXIT STLEN = # WORDS IN ST.)
0567	04600	026612R	JMP SPRC2	END OF FILE EXIT
0568	04601	002404	CLA, INA	SET FLAG TO INDICATE STORE DIRECTI
0569	04602	073243R	STA INFL	
0570	04603	163165R	LDA STRDB, I	GET WORD 1 OF INPUT
0571	04604	010075	AND B1774	MASK OUT 2ND CHARACTER
0572	04605	053324R	CPA B35K	IS 1ST CHAR = COLON?
0573	04606	026645R	JMP SPRC5	
0574	04607	017272R	SPRC3 JSB DISCW	WRITE A STAT.
0575	04610	036760R	ISZ CDCNT	BUMP STATEMEMNT COUNTER
0576	04611	026575R	JMP SPRC1	
0577	04612	017322R	SPRC2 JSB DWRD	(MLOCN IN A ON RETURN FROM DWRD)
0578	04613	002400	CLA	
0579	04614	173565R	STA MLOCN, I	SET NEXT STATE. VAL#0
0580	04615	017322R	JSB DWRD	
0581	04616	003400	CCA	
0582	04617	173565R	STA MLOCN, I	SET EOF WORD(=-1)
0583	04620	017322R	JSB DWRD	
0584	04621	052745R	CPA LNBUF	DID FILE END ON SECTOR BOUNDARY?
0585	04622	026625R	JMP SPRC4	YES
0586	04623	016741R	JSB NUSET	WRITE THE REST OF THE FILE
0587	04624	036014R	ISZ ENTLN	BUMP SECTOR COUNT
0588	04625	062760R	SPRC4 LDA CDCNT	GET STATEMENT COUNT
0589	04626	016525R	JSB CNDEC	GO CONVERT IT TO ASCII
0590	04627	072637R	STA SPRCX+2	
0591	04630	076636R	STB SPRCX+1	
0592	04631	064060	LDB .+5	WORD COUNT
0593	04632	062635R	LDA SPRCX	GET BUFFER ADDR
0594	04633	016744R	JSB ERRDG	PRINT THE LINE(STATEMENT) COUNT
0595	04634	026753R	JMP XSTOR	
0001	04635	004636R	SPRCX DEF ++1	ADDR OF MESSG BUFFER
0002	04636	020040	ASC 5,	LINES
0003	04643	004644R	BELLS DEF ++1	
0004	04644	003407	OCT 3407	
0005*				
0006*				
0007*				
0008	04645	062520R	SPRC5 LDA COLF	COLON OPTION?
0009	04646	002003	SZA, RSS	
0010	04647	026643R	JMP EOFER	NO. CAN'T STORE IT.
0011	04650	062771R	LDA INLUN	
0012	04651	010072	AND B77	
0013	04652	050112	CPA SYSTY	STORING FRO. KEYBOARD?
0014	04653	002001	RSS	YES, CHECK :OF & :AH
0015	04654	026607R	JMP SPRC3	NO. CAN STORE EVERYTHING.
0016*				
0017	04655	163165R	LDA STRDB, I	GET WORD 1
0018	04656	010074	AND B377	MASK OUT :
0019	04657	001727	ALF, ALF	LEFT JUSTIFY IT
0020	04660	070001	STA B	SAVE A
0021	04661	063165R	LDA STRDB	
0022	04662	002004	INA	POINT TO 2ND WORD
0023	04663	160000	LDA A, I	GET 2ND WORD
0024	04664	010075	AND B1774	MASK OUT 2ND CHAR
0025	04665	001727	ALF, ALF	RIGHT JUSTIFY
0026	04666	030001	IOR B	MAKE INTO 1 WORD FOR COMPARING

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0027 04667 053203R      CPA AOF      :OFF?
0028 04670 026614R      JMP OFF      YES. DON'T STORE IT
0029 04671 053143R      CPA CHARS+2   :AB?
0030 04672 053143R      CPA CHARS+2   :AB?
0031 04673 026450R      JMP EJOBX+1   YES. ABORT IT
0032 04674 026607R      JMP SPRC3
0033*
0034* *****
0035* * STORE ABSOLUTE BINARY PROGS. *
0036* *****
0037*
0038 04675 062771R STORX LDA INLUN
0039 04676 010072      AND B77      GET LUN ONLY
0040 04677 042522R      ADA B2300    SET CONTROL WORD FOR ABSOLUTE RE
0041 04700 072771R      STA INLUN
0042 04701 002404      CLA,INA
0043 04702 072751R      STA RBINF    SET BIN FLAG FOR DISCH & STORD
0044 04703 072752R      STA ABINF    SET ABS. BINARY FLAG
0045 04704 063235R STRX LDA B400     MAX. ABS. REC. LEN = 400 OCT.
0046 04705 067351R      LDB BFFAD
0047 04706 017145R      JSB STORD    READ A RECORD
0048 04707 026730R      JMP STRX1    END OF TAPE
0049*
0050* * CHECKSUM *
0051*
0052 04710 044051      ADB ,=2      ON EXIT,B=# WORDS IN RECORD
0053 04711 007004      CMB,INB
0054 04712 077600R      STB TEMP     MAKE IT A COUNTER
0055 04713 067351R      LDB BFFAD
0056 04714 006004      INB
0057 04715 002400      CLA          B=LOC OF 2ND WORD IN RECORD
0058 04716 140001      ADA B,I      INITIALIZE CHECKSUM
0059 04717 006004      INB          SUM IT UP.
0060 04720 037600R      ISZ TEMP     DONE?
0061 04721 026716R      JMP *-3     NO. ADD IN NEXT
0062 04722 164001      LDB B,I      GET CHECKSUM
0063 04723 054000      CPB A        SAME?
0064 04724 002001      RSS
0065 04725 026330R      JMP STRR2    NO. CHECKSUM ERROR
0066 04726 017272R      JSB DISCH   YES. STORE A REC. TO FILE
0067 04727 026704R      JMP STRX    GO GET NEXT REC
0068*
0069 04730 063565R STRX1 LDA MLOCN
0070 04731 052762R      CPA INB63    MLOCN AT ENT OF INBUF?
0071 04732 026737R      JMP STRX2    YES
0072 04733 017322R      JSB DWRD     NO. CONTINUE SETTING ZEROS
0073 04734 002400      CLA
0074 04735 173565R      STA MLOCN,I
0075 04736 026730R      JMP STRX1
0076 04737 017322R STRX2 JSB DWRD
0077 04740 026753R      JMP XSTOR

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0079* *****
0080* * NUSET = WRITE A SECTOR FROM INBUF TO THE NEXT *
0081* * SECTOR IN THE USER FILE. *
0082* * - TRACKS ARE SWITCHED AUTOMATICALLY. *
0083* * - BAD TRACKS ARE IGNORED IF ENCOUNTERED. *
0084* * NEWTS = THE TRACK AND SECTOR TO BE WRITTEN. *
0085* *****
0086 04741 000000 NUSET NOP
0087 04742 062766R LDA NEWTS
0088 04743 006404 CLB,INB WRITE 1 SECTOR
0089 04744 017425R JSB WDISC
0090 04745 011375R LNBUF DEF INBUF
0091 04746 072766R STA NEWTS SAVE NEW TRK/SECTOR POINTER
0092 04747 126741R JMP NUSET,I RETURN
0093*
0094* *****
0095* * STRAB = RESERVE ROOM IN THE USER FILE *
0096* * FOR ASCII(A) AND BINARY(B) SETS. *
0097* *****
0098 04750 062014R STRAB LDA ENTLN ** ENTER STRAB ROUTINE HERE *****
0099* NEWTS IS IN 'B'
0100 04751 016222R JSB STRAB SKIP TO NEW TRK/SECTOR ORIGIN
0101 04752 076766R STB NEWTS
0102*
0103 04753 062773R XSTOR LDA SAVML RESTORE DICT. POINTER(MLOCN)
0104 04754 073565R STA MLOCN
0105 04755 016774R JSB DCSTR GO STOR DIRECTORY ENTRY
0106 04756 026311R JMP RNS EXIT TO NEXT JOB STATEMENT
0107*
0108 04757 000000 CTEST NOP 'STORE' TYPE OR WORD COUNT
0109 04760 000000 CDCNT NOP REL,INBUF LOCN, OR CARD SEQ, CNT
0110 04761 011374R MINBF DEF INBUF-1
0111 04762 011574R INB03 DEF INBUF+127
0112 04763 011575R DNBUF DEF INBUF+128
0113 04764 000000 ENTYP NOP ENTRY TYPE
0114 04765 000000 ENTSC NOP START TRACK/SECTOR OF ENTRY
0115 04766 000000 NEWTS NOP START TRK/SECT FOR NEXT DISC J/O
0116 04767 000000 NEWSC NOP CURR. ENTRY SECTOR COUNTER
0117 04770 000000 INLEN NOP NO. OF WORDS READ FROM LUN
0118 04771 000000 INLUN NOP L.U.N.
0119 04772 000000 ENDFL NOP FLAG
0120 04773 000000 SAVML NOP SAVE MLOCN
0121*
0122* *****
0123* * DCSTR = EXIT PROCESSING FOR ;STORE AND ;EDIT*
0124* * SET UP AND STORE THE DIRECTORY ENTRY *
0125* *****
0126 04774 000000 DCSTR NOP
0127 04775 063601R LDA DICND
0128 04776 003004 CMA,INA
0129 04777 043565R ADA MLOCN
0130 05000 040057 ADA .+4
0131 05001 066764R LDB ENTYP GET ENTRY TYPE
0132 05002 044045 ADB .-6
0133 05003 006020 SSB 11=WORD ENTRY?
0134 05004 040061 ADA .+6 -YES

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0135	05005	002020	SSA	ROOM FOR NEW ENTRY?
0136	05006	027021R	JMP XSTR3	YES - GO TO CONTINUE
0137	05007	003400	CCA	
0138	05010	173565R	STA MLOCN,I	
0139	05011	016034R	JSB WSECT	WRITE CURRENT DICTIONARY SECTOR
0140	05012	002004	INA	
0141	05013	073566R	STA CURTS	CURTS SET TO REACT IN WSECT OK
0142	05014	010074	AND B377	
0143	05015	050054	CPA .+1	
0144	05016	027101R	JMP XSTOV	YES - OVERFLOW
0145	05017	063620R	LDA DICAD	
0146	05020	073565R	STA MLOCN	RESET MLOCN TO START OF BUFFER.
0147	05021	063570R	XSTR3 LDA NMBUF	
0148	05022	173565R	STA MLOCN,I	*
0149	05023	037565R	ISZ MLOCN	*
0150	05024	063571R	LDA NMBUF+1	* STORE FILENAME INTO ENTRY * **
0151	05025	173565R	STA MLOCN,I	*
0152	05026	037565R	ISZ MLOCN	*
0153	05027	063572R	LDA NMBUF+2	* * * * *
0154	05030	042764R	ADA ENTYP	
0155	05031	173565R	STA MLOCN,I	STORE TYPE INTO ENTRY
0156	05032	037565R	ISZ MLOCN	
0157	05033	062765R	LDA ENTSC	STORE STARTING TRACK/SECTOR
0158	05034	173565R	STA MLOCN,I	
0159	05035	037565R	ISZ MLOCN	
0160	05036	062014R	LDA ENTLN	STORE ENTRY LENGTH(IN SECTOR)
0161	05037	002003	SZA,RSS	ANYTHING STORED?
0162	05040	126774R	JMP DCSTR,I	NO.. EXIT
0163	05041	173565R	STA MLOCN,I	
0164	05042	037565R	ISZ MLOCN	
0165	05043	062764R	LDA ENTYP	
0166	05044	040045	ADA .-6	
0167	05045	002021	SSA,RSS	ENTRY COMPLETE?
0168	05046	027057R	JMP XSTR5	-YES
0169	05047	063470R	LDA DRNXT	-NO, 11-WORD ENTRY
0170	05050	040060	ADA .+5	
0171	05051	067565R	LDB MLOCN	
0172	05052	017047R	JSB WMOVE	MOVE 6 MORE WORDS
0173	05053	000006	DEC 6	
0174	05054	067565R	LDB MLOCN	
0175	05055	044061	ADB .+6	
0176	05056	077565R	STB MLOCN	UPDATE MLOCN
0177	05057	062766R	XSTR5 LDA NEWTS	
0178	05060	017372R	JSB SETNX	SET NEXT AVAIL T/S
0179	05061	063565R	LDA MLOCN	
0180	05062	053601R	CPA DICND	WAS SECTOR FILLED TO END?
0181	05063	027070R	JMP XSTR7	YES - GO FIX
0182	05064	006400	XSTR6 CLB	NO..
0183	05065	177565R	STB MLOCN,I	SET END OF DICTIONARY
0184	05066	016034R	JSB WSECT	
0185	05067	126774R	JMP DCSTR,I	RETURN
0186*				
0187	05070	016034R	XSTR7 JSB WSECT	WRITE THE FULL SECTOR
0188	05071	002004	INA	
0189	05072	073566R	STA CURTS	
0190	05073	010074	AND B377	

PAGE 0066 #06 STORE INFORMATION INTO A USER FILE

0191	05074	050054	CPA	.*+1	
0192	05075	126774R	JMP	DCSTR,1	YES = GO TO EXIT PROC
0193	05076	063620R	LDA	DICAD	
0194	05077	073565R	STA	MLOCN	
0195	05100	027064R	JMP	XSTR6	
0196*					
0197	05101	064065	XSTOV	LDB	.*+10
					DICTIONARY OVERFLOW EXIT
0198	05102	063104R	LDA	.*+2	
0199	05103	026447R	JMP	EJOBX	GO PRINT 'DIC OV' AND ABORT
0200	05104	005105R	DEF	.*+1	
0201	05105	042111	ASC	10,DICTIONARY OVERFLOW.	

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0203* *****
0204* * FNUND = PRINT 'FILENAME UNDEFINED' *
0205* *****
0206 05117 000000 FNUND NOP
0207 05120 063572R LDA NMBUF+2
0208 05121 043574R ADA B40 40B
0209 05122 073572R STA NMBUF+2 STORE A BLANK IN 6TH CHAR.
0210 05123 064063 LDB ,+8
0211 05124 063567R LDA NMBUF-1
0212 05125 073256R STA TEMP1 SAVE A & B IN CASE OF LISTING ERR
0213 05126 077257R STB TEMP2 ON LIST DEV.
0214 05127 016020R JSB ERLST
0215 05130 127117R JMP FNUND,I
0216*
0217* *****
0218* * PCHEK = CHECK FOR 'P' BIT IN A DIREC- *
0219* * TORY ENTRY(SET BY LOADER). *
0220* * IF PRESENT, WRITE ENTRY BACK TO DISC *
0221* * AFTER CLEAR IS EXECUTED. *
0222* *****
0223 05131 000000 PCHEK NOP
0224 05132 067565R LDB MLOCN B = START ENTRY
0225 05133 044055 ADB ,+2 B POINTS AT ENTRY TYPE WORD
0226 05134 160001 LDA B,I
0227 05135 001727 ALF,ALF P BIT IN SIGN POSITION
0228 05136 002021 SSA,RSS IS IT THERE?
0229 05137 127131R JMP PCHEK,I NO = LEAVE ROUTINE
0230*
0231 05140 001665 ELA,CLE,ERA YES = CLEAR 'P' FROM ENTRY
0232 05141 001727 ALF,ALF
0233 05142 170001 STA B,I RESTORE ENTRY TYPE WORD
0234 05143 016034R JSB WSECT GO WRITE ENTRY BACK INTO DICT.
0235 05144 127131R JMP PCHEK,I RETURN
0236*
0237* *****
0238* * STORD = READ FROM INPUT L,U,N; A = WORD COUNT *
0239* * L+1 EXIT = END OF FILE B = BUFFER ORG. *
0240* * L+2 EXIT IS NORMAL; STLEN = NO. OF WORDS MOVED *
0241* *****
0242 05145 000000 STORD NOP
0243 05146 072770R STA INLEN SET BUFFER LENGTH
0244 05147 077165R STB STRDB
0245 05150 006404 CLB,INB B=1 (FOR INPUT LUN)
0246 05151 062771R LDA INLUN
0247 05152 050054 CPA ,+1 IS IT THE TTY?
0248 05153 043235R ADA B400 YES, SET IT TO ECHO INPUT CHARS.
0249 05154 073271R STA LUNIT SET INTO THE LUN
0250 05155 073647R STA SAVEA
0251 05156 017506R JSB LUCKH CHECK STATUS OF LUN
0252 05157 017634R JSB NULCK
0253 05160 127145R JMP STORD,I
0254 05161 016001X JSB EXEC
0255 05162 005167R DEF ,+5
0256 05163 000052 DEF ,+1 -1 = READ
0257 05164 005271R DEF LUNIT CONTROL WORD
0258 05165 000000 STRDB NOP L(BUFFER)

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0259 05166 004770R DEF INLEN BUFFER LENGTH
0260 05167 013477R AND B240
0261 05170 002002 SZA END OF TAPE/FILE/ETC.?
0262 05171 027240R JMP ASKER YES - GO SEE IF THERE'S MORE.
0263 05172 163165R LDA STRDB,I
0264 05173 053265R CPA DBCOL END OF INPUT? (1ST 2 CHARS = ::)
0265 05174 027224R JMP COLTS
0266 05175 006003 NOTCO SZB,RSS
0267 05176 027150R JMP STORD+3 YES, IGNORE RECORD
0268 05177 076216R STB STLEN SAV STATEMENT LENGTH
0269 05200 037145R ISZ STORD
0270 05201 010074 AND B377 CLEARS A IF BIN FILE IN..
0271 05202 066751R LDB RBINF B=0 IF SOURCE INPUT REQUEST
0272 05203 052751R CPA RBINF SOURCE READ ON REL BIN REQ.?
0273 05204 027210R JMP ++4 YES, ERROR
0274 05205 006002 SZB REL. BINARY REQUESTED?
0275 05206 002003 SZA,RSS YES, WAS SOURCE READ INSTEAD?
0276 05207 027222R JMP STRDX NO, IT'S OK.
0277 05210 064061 LDB .+6 START ERROR SETUP
0278 05211 063213R LDA ++2
0279 05212 026130R JMP PMISS+2 GO TO PRINT AND RE-READ..
0280 05213 005214R DEF ++1
0281 05214 053522 ASC 6,WRONG INPUT!
0282 05222 066216R STROX LDB STLEN RESET B TO = STATEMENT LENGTH.
0283 05223 127145R JMP STORD,I EXIT L+2 = NORMAL
0284*
0285* * IF STORE SOURCE WITH COLON OPTION, ::: IS ENDFILE 0*
0286*
0287 05224 073647R COLTS STA SAVEA SAVE A REGISTER
0288 05225 062520R LDA COLF
0289 05226 002003 SZA,RSS COLON FLAG ON?
0290 05227 127145R JMP STORD,I NO, END OF FILE
0291 05230 063165R LDA STRDB YES, CHECK IF TRIPLE COLON
0292 05231 002004 INA POINT TO 2ND WORD
0293 05232 160000 LDA A,I GET 2ND WORD
0294 05233 010075 AND B1774 MASK OUT 2ND CHAR
0295 05234 053324R CPA B35K COLON?
0296 05235 127145R JMP STORD,I YES, END OF FILE
0297 05236 063647R LDA SAVEA RESTORE A REG.
0298 05237 027175R JMP NOTCO NO, CONTINUE
0299*
0300* * ASKER - CHECKS FOR END OF INPUT ON TELETYPE *
0301* * ASKS 'DONE ?' *
0302* * REPLY TYPED IN BY USER *
0303* * 'YES' OR 'NO' OTHER REPLYS LOOP BACK*

0305 05240 016250R ASKER JSB UPDVC SET DEVICE AVAILABLE
0306 05241 063260R ASKX LDA ADONE
0307 05242 064056 LDB .+3
0308 05243 016744R JSB ERRDG WRITE 'DONE?' ON TTY

0310 05244 016001X JSB EXEC READ REPLY FROM TTY
0311 05245 005252R DEF ++5
0312 05246 000052 DEF .-1
0313 05247 005264R DEF B401 CONTROL WORD=401B
0314 05250 003600R DEF TEMP INPUT BUFFER

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0315	05251	000054	DEF	++1	= 1 WORD
0316	05252	063600R	LDA	TEMP	
0317	05253	052371R	CPA	AND	'NO'
0318	05254	027150R	JMP	STORD+3	"NO" GO BACK AND RE-READ
0319	05255	053266R	CPA	AYES	
0320	05256	127145R	JMP	STORD,I	"YES" TAKE END FILE(L+1) RETURN
0321	05257	027241R	JMP	ASKX	WRONG ANSWER - ASK AGAIN
0323	05260	005261R	ADONE	DEF	++1
0324	05261	042117	ASC	3,DONE?	
0325	05264	000401	B401	OCT	401
0326	05265	035072	DBCOL	ASC	1,::
0327	05266	054505	AYES	ASC	1,YE
0328	05267	000000	TERMS	NOP	NO.OF WORDS TO TRANSFER
0329	05270	000000	SBUFF	NOP	POSITION IN TRANSFER BUFFER
0330	05271	000000	LUNIT	NOP	INPUT CONTROL WORD(LUN)

```

0332* *****
0333* * DISCW/DWRD WRITES ONE SOURCE STATEMENT INTO THE *
0334* * DISC INPUT BUFFER, WHEN THE BUFFER IS FILLED *
0335* * IT IS WRITTEN ONTO THE DISC. *
0336* * PARAMETERS: *
0337* * INBUF = START OF 64(128 ACT.)WORD DISC BUFFER *
0338* * MLOCN = POINTER TO CURRENT LOCN IN INBUF *
0339* * NEWTS = TRACK/SECTOR TO BE WRITTEN(CURRENT) *
0340* * STLEN =# WORDS IN STATEMENT(PLACED IN WORD 1 *
0341* * OF EACH STATEMENT; IN UPPER HALF) *
0342* * BFFAD = CONTAINS FWA OF STATE,BUFFER(BUFFR) *
0343* * INITIALLY: *
0344* * MLOCN = A(INBUF-1) *
0345* * ENTLN = 0(COUNTS # OF SECTORS WRITTEN) *
0346* *****
0347 05272 000000 DISCW NOP
0348 05273 017322R JSB DWRD
0349 05274 062216R LDA STLEN GET # WORDS IN STATEMENT
0350 05275 066752R LDB ABINF ABINF#1 IF ABSOLUTE BINARY
0351 05276 006002 SZB
0352 05277 040050 ADA ,=3 FIX UP ABS BIN REC LENGTH
0353 05300 001727 ALF,ALF
0354 05301 173565R STA MLOCN,I SET IT INTO 1ST WORD OF BUFFER
0355 05302 062216R LDA STLEN GET # WORDS TRANSFERRED,
0356 05303 003004 CMA,INA
0357 05304 042751R ADA RBINF REDUCES COUNT BY 1 IF RELOC.BIN.
0358 05305 073267R STA TERMS SET WORD COUNTER
0359 05306 002003 SZA,RSS WORD COUNT#0?
0360 05307 127272R JMP DISCW,I YES = TAKE EXIT
0361 05310 063351R LDA BFFAD
0362 05311 042751R ADA RBINF BUMP FWA BY 1 IF REL BIN.
0363 05312 073270R STA SBUFF SET FWA OF 'BUFFR'
0364 05313 017322R DSCW2 JSB DWRD
0365 05314 167270R LDB SBUFF,I STORE A WORD
0366 05315 177565R STB MLOCN,I
0367 05316 037270R ISZ SBUFF
0368 05317 037267R ISZ TERMS ARE WE DONE?
0369 05320 027313R JMP DSCW2 NO
0370 05321 127272R JMP DISCW,I EXIT ROUTINE
0371*
0372* * DWRD BUMPS 'MLOCN'; IF INBUF IS FULL IT IS *
0373* * WRITTEN ONTO THE DISC AT TRK/SECTOR 'NEWTS'. *
0374* * AFTER WRITING 'ENTLN'(SECTOR COUNTER) IS *
0375* * BUMPED AND 'MLOCN' IS POINTED TO 'INBUF'. *
0376*
0377 05322 000000 DWRD NOP
0378 05323 037565R ISZ MLOCN
0379 05324 063565R LDA MLOCN
0380 05325 052763R CPA DNBUF IS INBUF FILLED?
0381 05326 002001 RSS
0382 05327 127322R JMP DWRD,I NO = RETURN
0383 05330 016741R JSB NUSET YES = WRITE IT TO THE DISC
0384 05331 036014R ISZ ENTLN BUMP SECTOR COUNTER
0385 05332 062745R LDA LNBUF
0386 05333 073565R STA MLOCN RESET MLOCN TO START OF INBUF
0387 05334 127322R JMP DWRD,I

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0389* *****
0390* * DISCR/DRORD READS A SOURCE STATEMENT FROM THE DISC *
0391* *   OUTPUT BUFFER(INBUF). WHEN THE BUFFER IS EX- *
0392* *   HAUSTED ANOTHER SECTOR IS READ FROM THE DISC. *
0393* * PARAMETERS: *
0394* *   INBUF = START OF 64(128)WORD DISC BUFFER. *
0395* *   MLOCN = POINTER TO CURRENT LOC'N IN 'INBUF'. *
0396* *   CURTS = CURRENT TRK/SECTOR TO BE READ FROM DISC.*
0397* *   STLEN = # OF WORDS IN STATEMENT READ FROM INBUF.*
0398* *   BFFAD = FWA OF BUFFER CONTAINING THE STATEMENT. *
0399* *   ENTLN = # OF SECTORS IN SOURCE FILE *
0400* * INITIALLY: *
0401* *   MLOCN = A(INBUF+64); THIS CAUSES THE 1ST READ. *
0402* *   ENTLN = -(SECTORS+1) *
0403* * EXITS: L+1=END OF FILE(ENTLN OR STLEN = 0) *
0404* *   L+2= NORMAL WITH A = STLEN *
0405* *****
0406 05335 000000 DISCR NOP
0407 05336 017367R JSB DRORD GO GET THE 1ST WORD(= # OF WRDS)
0408 05337 001727 ALF,ALF
0409 05340 072216R STA STLEN SAVE STATEMENT LENGTH
0410 05341 002003 SZA,RSS IS IT#0
0411 05342 127335R JMP DISCR,I YES=END OF FILE EXIT
0412 05343 066752R LDB ABINF ABSOLUTE BINARY?
0413 05344 006002 SZB
0414 05345 040056 ADA ,+3 YES. FIX UP REC. LENGTH
0415 05346 003004 CMA,INA
0416 05347 073267R STA TERMS SET WORD COUNTER
0417 05350 063351R LDA BFFAD
0418 05351 073270R STA SBUFF SET START OF 'BUFFR'
0419 05352 062751R LDA RBINF
0420 05353 002003 SZA,RSS DUMPING REC.BIN.?
0421 05354 027357R JMP DSCR2 NO
0422 05355 062216R LDA STLEN YES = SETUP TO DUMP OUT
0423 05356 001737 ALF,SLA,ALF ENTRY LENGTH AS 1ST WORD
0424 05357 017367R DSCR2 JSB DRORD
0425 05360 173270R STA SBUFF,I
0426 05361 037270R ISZ SBUFF
0427 05362 037267R ISZ TERMS HAVE WE FINISHED THE STATEMENT?
0428 05363 027357R JMP DSCR2 NO
0429 05364 037335R ISZ DISCR YES = RETURN TO MAIN
0430 05365 062216R LDA STLEN SETS A NON ZERO
0431 05366 127335R JMP DISCR,I
0432*
0433* * DRORD PULLS A WORD FROM INBUF; WHEN INBUF IS EX- *
0434* *   HAUSTED A NEW SECTOR IS READ FROM THE DISC. *
0435* *   BEFORE THE READ ENTLN IS BUMPED, IF#0 THEN THE*
0436* *   FILE IS FINISHED AND EOFIL IS SET #0 *
0437*
0438 05367 000000 DRORD NOP
0439 05370 063565R LDA MLOCN
0440 05371 052763R CPA DNBUF MLOCN AT END OF INBUF?
0441 05372 002001 RSS YES
0442 05373 027402R JMP DWD5 NO = GO GET THE NEXT WORD
0443 05374 062745R LDA LNBUF
0444 05375 073565R STA MLOCN SET MLOCN TO START OF INBUF

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0445	05376	036014R	ISZ ENTLN	ARE WE AT THE END?
0446	05377	002001	RSS	NO - CONTINUE
0447	05400	127335R	JMP DISCR,I	YES - TAKE L+1 EXIT FROM DISCR
0448	05401	017477R DWD4	JSB RSECT	
0449	05402	163565R DWD5	LDA MLOCN,I	GET NEXT WORD FROM BUFFER
0450	05403	037565R	ISZ MLOCN	BUMP POINTER
0451	05404	127367R	JMP DRORD,I	EXIT TO DISCR

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0453* *****
0454* * LIST - LIST SOURCE STATEMENTS (TYPE S) *
0455* * - SYSTEM DIRECTORY ENTRY (TYPE X) *
0456* * - USER DIRECTORY ENTRIES (TYPE U) *
0457* * FORMAT IS:
0458* *NAME TYPE #SECS TRKORG PROG/B.P.LIMITS MEM.ORG.*
0459* *****
0460 05405 017774R LIST JSB TYPES GO GET 'TYPE' CHARACTER
0461* * ON EXIT THE 'TYPE' CHAR IS IN 'CTEST'
0462 05406 016515R JSB ASCDC GO GET L,U,N.
0463 05407 026126R JMP PMISS ERROR = NO PARAMETER
0464 05410 002103 CLE,SZA,RSS IS VALUE = 0?
0465 05411 027562R JMP LUCH3 ZERO = ILL LUN
0466 05412 072213R STA LSTLN SET LOG UNIT IN LIST DRIVER
0467 05413 066757R LDB CTEST GET LIST TYPE
0468 05414 062773R LDA USDIR
0469 05415 057730R CPB B123 SOURCE?
0470 05416 027427R JMP LIST5 YES
0471 05417 057540R CPB B125 USER DIREC.?
0472 05420 027427R JMP LIST5 YES
0473 05421 060114 LDA SYSDR
0474 05422 057541R CPB B130 SYSTEM DIRECT?
0475 05423 002301 CCE,RSS -YES
0476 05424 026741R JMP PILLG NO = ILLEGAL PARAMETER
0477 05425 067477R LDB LUN2
0478 05426 077623R STB FLUN SET DISC = LUN2
0479 05427 073537R LIST5 STA LIST6 SET TRK/SECTR OF CORRESP DIRECT.
0480 05430 060161 LDA CUDSC
0481 05431 002040 SEZ
0482 05432 060155 LDA SYSSC
0483 05433 073131R STA PCHEK
0484 05434 062213R LDA LSTLN EJECT A PAGE BEFORE LISTING
0485 05435 017515R JSB PGEJ
0486 05436 063710R LDA LISTH
0487 05437 066757R LDB CTEST
0488 05440 057730R CPB B123 IS THIS A SOURCE LISTING?
0489 05441 027444R JMP ++3 YES, SKIP HEADER PRINTOUT
0490 05442 066041R LDB D36
0491 05443 016256R JSB LSTIO GO LIST THE HEADER
0492 05444 037232R ISZ PMLOC
0493 05445 037232R ISZ PMLOC
0494 05446 063232R LDA PMLOC
0495 05447 017714R JSB NXSET
0496 05450 062757R LDA CTEST GE T LIST TYPE.
0497 05451 167232R LDB PMLOC,I
0498 05452 006002 SZB
0499 05453 027504R JMP LIST4 IS A FILENAME PRESENT?
0500 05454 053730R CPA B123 YES = GO LIST GIVEN FILENAMES
0501 05455 026126R JMP PMISS SOURCE LISTING?
0502 05456 063131R LDA PCHEK YES, GO TO ERROR DIAGNOSTIC EXIT
0503 05457 002300 LIST1 CCE
0504 05460 016010R JSB RPTSC
0505 05461 063537R LDA LIST6 NO=LIST ALL DIREC.(A=TRK/SECTR)
0506 05462 017624R JSB READ1 INIT CURTS/MLOCN; READ SECTR 1.
0507 05463 027466R JMP ++3
0508 05464 016035R LIST2 JSB LSENT LIST AN ENTRY

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0509	05465	017603R		JSB GETNX	
0510	05466	163565R		LDA MLOCN,I	
0511	05467	002002		SZA	IF A#0 WE'RE DONE,
0512	05470	027464R		JMP LIST2	GO LIST THE CURRENT ENTRY
0513	05471	017542R		JSB SCTST	
0514	05472	027457R		JMP LIST1	
0515	05473	017441R	LIST9	JSB RESET	
0516	05474	062757R		LDA CTEST	
0517	05475	053540R		CPA B125	
0518	05476	026311R		JMP RNS	DONE - EXIT
0519	05477	000240	B240	OCT 240	-CLE- INSTRUCTION
0520	05500	017117R		JSB FNUND	
0521	05501	016203R		JSB ERMES	LIST ERR MESS ON LIST DEV IF BAT
0522	05502	026136R		JMP RNSY	KEYBOARD MODE
0523	05503	026311R		JMP RNS	BATCH MODE - DON'T ABORT.
0524*					
0525	05504	053730R	LIST4	CPA B123	
0526	05505	027514R		JMP LIST8	
0527	05506	002300		CCE	
0528	05507	060161		LDA CUDSC	
0529	05510	067623R		LDB FLUN	
0530	05511	057477R		CPB LUN2	:LI,X?
0531	05512	063131R		LDA PCHEK	-YES, SET SYSTEM SUBCHNL
0532	05513	016010R		JSB RPTSC	
0533	05514	167232R	LIST8	LDB PMLOC,I	
0534	05515	017626R	LIST3	JSB PMNXT	
0535	05516	017501R		JSB DIRSR	
0536	05517	005537R		DEF LIST6	
0537	05520	002302		CCE,SZA	WAS FILENAME DEFINED?
0538	05521	027527R		JMP LIST7	-YES
0539	05522	062757R		LDA CTEST	
0540	05523	053730R		CPA B123	
0541	05524	027534R		JMP BGLBL	
0542	05525	017117R		JSB FNUND	
0543	05526	002001		RSS	
0544	05527	016035R	LIST7	JSB LSENT	
0545	05530	037232R		ISZ PMLOC	
0546	05531	167232R		LDB PMLOC,I	
0547	05532	006002		SZB	
0548	05533	027515R		JMP LIST3	NO - IS ANOTHER PARAM THERE?
0549	05534	017542R	BGLBL	JSB SCTST	YES - CONTINUE
0550	05535	062757R		LDA CTEST	
0551	05536	027504R		JMP LIST4	
0552*					
0553	05537	000000	LIST6	NOP	SAVE DICTIONARY TRK/SECTOR
0554	05540	000125	B125	OCT 125	
0555	05541	000130	B130	OCT 130	
0556*					
0557	05542	000000	SCTST	NOP	
0558	05543	063623R		LDA FLUN	
0559	05544	053477R		CPA LUN2	
0560	05545	026311R		JMP RNS	
0001	05546	017725R		JSB NXTSC	
0002	05547	027473R		JMP LIST9	
0003	05550	063760R		LDA SAVPM	
0004	05551	073232R		STA PMLOC	

PAGE 0075 #07 LIST DIRECTORY ENTRIES AND USER FILES

0005	05552	062773R	LDA USDIR
0006	05553	073537R	STA LIST6
0007	05554	060161	LDA CUDSC
0008	05555	127542R	JMP SCTST,I


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0010* *****
0011* * SLIST - LIST SOURCE STAMENTS AS INDICATED *
0012* * FORMAT = !LIST,S,LUN,M,N *
0013* *****
0014 05556 000043 SLIST DEC 35 -CLE= INSTRUCTION
0015 05557 060161 LDA CUDSC
0016 05560 053456R CPA SAVSC
0017 05561 002001 RSS
0018 05562 016010R JSB RPTSC
0019 05563 037232R ISZ PMLOC
0020 05564 167232R LDB PMLOC,I
0021 05565 063441R LDA INBUF+36
0022 05566 050064 CPA .+11B SOURCE FILE?
0023 05567 002001 RSS YES
0024 05570 027761R JMP FNILL NO = ILLEGAL FILENAME
0025 05571 002404 CLA,INA SET A#1
0026 05572 072760R STA CDCNT
0027 05573 006003 SZB,RSS IS 1ST LIMIT PRESENT?
0028 05574 027601R JMP SLST1 NO = GO SET FOR COMPLETE FILE
0029 05575 064041 LDB .-10
0030 05576 016605R JSB ASCNV
0031 05577 037232R ISZ PMLOC NO
0032 05600 037232R ISZ PMLOC
0033 05601 072767R SLST1 STA NEWSC SAVE STARTING LOCN
0034 05602 003400 CCA A = -1
0035 05603 167232R LDB PMLOC,I
0036 05604 006003 SZB,RSS ANOTHER PARAMETER?
0037 05605 027615R JMP SLST2 NO
0038 05606 064041 LDB .-10
0039 05607 016605R JSB ASCNV CONVERT UPPER LIMIT
0040 05610 066767R LDB NEWSC GET START
0041 05611 007004 CMB,INB
0042 05612 044000 ADB A
0043 05613 006020 SSB IS START BEYOND FINISH?
0044 05614 027676R JMP SLSTE YES = RANGE ERROR
0045 05615 072772R SLST2 STA ENDFL SAVE UPPER LIMIT OF LIST
0046 05616 062766R LDA NEWTS
0047 05617 073566R STA CURTS SET STARTING TRK/SECTOR FOR READ
0048 05620 062763R LDA DNBUF
0049 05621 073565R STA MLOCN INITIALIZE MLOCN
0050 05622 062014R LDA ENTLN
0051 05623 003000 CMA
0052 05624 072014R STA ENTLN ENTLN = -(#SECTRS+1)
0053 05625 017335R SLST3 JSB DISCR GO READ A STATEMENT
0054 05626 027673R JMP SLST8 END-OF-FILE EXIT
0055 05627 062760R LDA CDCNT
0056 05630 052767R CPA NEWSC DO WE LIST THE CURRENT STATE.?
0057 05631 002001 RSS YES
0058 05632 027651R JMP SLST4 NO = GO START FOR NEXT STATEMENT
0059 05633 016525R JSB CNDEC CONVERT A TO DECIMAL DIGITS
0060 05634 076760R STB BUFFER-3 STORE SEQ. NO
0061 05635 072761R STA BUFFER-2
0062 05636 063374R LDA BLNKS
0063 05637 072762R STA BUFFER-1
0064 05640 066216R LDB STLEN
0065 05641 044056 ADB .+3 B = STATE. LENGTH

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0066 05642 063773R LDA STBUF A = BUFFER ORG.(STBUF)
0067 05643 016256R JSB LSTIO LIST THE STATEMENT
0068 05644 062760R LDA CDCNT
0069 05645 052772R CPA ENDFL HAVE WE LISTED THE LAST LINE?
0070 05646 027653R JMP SLST7 YES = GO PRINT 'LIST END'
0071 05647 002004 INA
0072 05650 072767R STA NEWS C
0073 05651 036760R SLST4 ISZ CDCNT NO, CONTINUE
0074 05652 027625R JMP SLST3
0075 05653 064064 SLST7 LDB .+9
0076 05654 063657R LDA .+3
0077 05655 016256R JSB LSTIO
0078 05656 026311R JMP RNS GO GET NEXT STATEMENT
0079 05657 005660R DEF .+1
0080 05660 025052 ASC 11,**** LIST END ****
0081*
0082 05673 062760R SLST8 LDA CDCNT
0083 05674 052767R CPA NEWS C HAVE WE LISTED ANY STATEMENTS.
0084 05675 027653R JMP SLST7 YES = GO BACK TO NORMAL EXIT
0085 05676 064061 SLSTE LDB .+6 PRINT ERROR DIAGNOSTIC
0086 05677 063701R LDA .+2
0087 05700 026130R JMP PMISS+2
0088 05701 005702R DEF .+1
0089 05702 046111 ASC 6,LIMIT ERROR
0090*
0091 05710 005711R LISTH DEF .+1
0092 05711 047101 ASC 21,NAME TYPE SCTRS DISC ORG PROG LIMIT
0093 05736 020102 ASC 13, B.P. LIMITS ENTRY LIBR.
0094 05753 020040 ASC 2, PB
0095*
0096* * INFORMATION TO BE OUTPUT UNDER HEAD(ABOVE) IN 'INBUF'
0097* * IT IS SET UP AS SHOWN BELOW(OFFSET BY 2)
0098*
0099*+0 3 5 8 10 12 15 19 22 26 30
0100* FNAME XX XXXX TXXX SXX LLLLL UUUUU LLLLL UUUUU AAAAA BBBB
0101*
0102 05755 005756R ETYPE DEF .+1
0103 05756 051522 ASC 13,SRXS UMDRUSLB RBSSBDADAB ENTRY TYPES
0104*
0105 05760 LSTBL EQU ETYPE+3 BUFFER LENGTH HERE
0106 05765 STKTS EQU ETYPE+8 SAVE TRACK/SECTOR FOR STRAK
0107 05773 006760R STBUF DEF BUFFER-3
0108*
0109*
0110* *****
0111* * TYPES = GET 1ST PARAMETER, ASSUMED TO BE 'TYPE' *
0112* * -ERROR IF MISSING OR MORE THAN 1 CHARACTER. *
0113* * -EXIT WITH CHARACTER IN LOWER A(UPPER=0) *
0114* *****
0114 05774 000000 TYPES NOP
0115 05775 017625R JSB PMNXT GET ADDRESS OF 'TYPE'
0116 05776 002003 SZA,RSS MISSING?
0117 05777 026126R JMP PMISS YES = GO TO PARAM MISSING DIAG.
0118 06000 016774R JSB GETC
0119 06001 037232R ISZ PMLOC
0120 06002 167232R LDB PMLOC,I
0121 06003 054054 CPB .+1 ONE NON-NUMERIC CHARACTER?

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0122	06004	002001	RSS	YES - EXIT WITH THE 'TYPE' IN A.
0123	06005	026741R	JMP PILLG	NO - ITS ILLEGAL - GO TO DIAG.
0124	06006	072757R	STA CTEST	
0125	06007	127774R	JMP TYPES,I	
0126*				
0127	06010	000000	RPTSC NOP	
0128	06011	033576R	IOR UBB60	
0129	06012	001727	ALF,ALF	
0130	06013	072034R	STA SCMSG+5	
0131	06014	062027R	LDA SCMSG	
0132	06015	064060	LDB .+5	
0133	06016	016020R	JSB ERLST	
0134	06017	126010R	JMP RPTSC,I	
0135*				
0136	06020	000000	ERLST NOP	
0137	06021	002041	SEZ,RSS	
0138	06022	026025R	JMP ++3	
0139	06023	016256R	JSB LSTIO	
0140	06024	126020R	JMP ERLST,I	
0141	06025	016744R	JSB ERROG	
0142	06026	126020R	JMP ERLST,I	
0143*				
0144	01576		UBB60 EQU A0	OCT 020060
0145*				
0146	06027	006030R	SCMSG DEF ++1	
0147	06030	051525	ASC 5,SUBCHAN=	

```

0149*
0150*
0151*
0152*
0153*
0154 06035 000000 LSENT NOP
0155 06036 062761R LDA MINBF
0156 06037 066745R LDB LNBUF
0157 06040 017047R JSB WMOVE CLEAR PRINT BUFFER
0158 06041 000044 D36 DEC 36
0159 06042 067565R LDB MLOCN
0160 06043 076214R STB STEST SET CTEST = START OF ENTRY
0161 06044 162214R LDA STEST,I * * *
0162 06045 073375R STA INBUF *
0163 06046 036214R ISZ STEST *
0164 06047 162214R LDA STEST,I *
0165 06050 073376R STA INBUF+1 * STORE THE FILENAME INTO
0166 06051 036214R ISZ STEST * THE OUTPUT BUFFER
0167 06052 162214R LDA STEST,I *
0168 06053 010075 AND B1774 *
0169 06054 043574R ADA B40
0170 06055 073377R STA INBUF+2 * * *
0171 06056 162214R LDA STEST,I
0172 06057 010073 AND B177 GET TYPE CODE
0173 06060 073441R STA INBUF+36 SAVE IT
0174 06061 043755R ADA ETYPE
0175 06062 164000 LDB A,I
0176 06063 077400R STB INBUF+3 AND SET IT INTO THE LIST BUFFER
0177 06064 162214R LDA STEST,I
0178 06065 001727 ALF,ALF
0179 06066 066217R LDB UPT
0180 06067 002020 SSA
0181 06070 077440R STB INBUF+35
0182 06071 036214R ISZ STEST
0183 06072 162214R LDA STEST,I PICK UP TRACK ADDRESS
0184 06073 072766R STA NEWTS SAVE TRK/SECTOR FOR SLIST
0185 06074 001727 ALF,ALF
0186 06075 010074 AND B377
0187 06076 016525R JSB CNDEC CONVERT A TO DECIMAL DIGITS
0188 06077 073407R STA INBUF+10
0189 06100 060001 LDA B
0190 06101 010074 AND B377
0191 06102 042221R ADA B52K SET 'I' (B52000)
0192 06103 073406R STA INBUF+9 TRACK ADDRESS
0193 06104 162214R LDA STEST,I PICK UP SECTOR ADDRESS
0194 06105 010074 AND B377
0195 06106 016525R JSB CNDEC CONVERT A TO DECIMAL DIGITS
0196 06107 073411R STA INBUF+12
0197 06110 060001 LDA B UPPER 2 CHARS. TO B
0198 06111 012220R AND B2037 BLANK OUT UPPER CHARACTER
0199 06112 073410R STA INBUF+11 SECTOR NOW SET
0200 06113 036214R ISZ STEST
0201 06114 162214R LDA STEST,I GET SECTOR COUNT
0202 06115 072014R STA ENTLN SAVE FOR SLIST IF NEEDED
0203 06116 016525R JSB CNDEC CONVERT A TO DECIMAL DIGITS
0204 06117 077403R STB INBUF+6

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0205	06120	073404R	STA INBUF+7	AND STORE COUNT
0206	06121	062561R	LDA CNMBR+1	
0207	06122	012220R	AND B2037	
0208	06123	073402R	STA INBUF+5	
0209	06124	063441R	LDA INBUF+36	
0210	06125	010073	AND B177	
0211	06126	040045	ADA .-6	
0212	06127	067575R	LDB D13	
0213	06130	002021	SSA,R38	5 WORD ENTRY?
0214	06131	026146R	JMP LSEN7	GO TO PRINT SECTION
0215	06132	062220R	LDA B2037	
0216	06133	072212R	STA ANVAL	SET MASK VALUE TO BLNK 1ST DIGIT
0217	06134	062154R	LDA FWPRG	
0218	06135	016155R	JSB ADSET	SET FWA PROGRAM
0219	06136	016155R	JSB ADSET	SETUP LWA PROGRAM
0220	06137	002004	INA	
0221	06140	016155R	JSB ADSET	SETUP FWA B.P.
0222	06141	016155R	JSB ADSET	SETUP LWA B.P.
0223	06142	002004	INA	
0224	06143	016155R	JSB ADSET	SETUP ENTRY POINT ADDRESS
0225	06144	016155R	JSB ADSET	SETUP LIB RTNS. ADDR.
0226	06145	066041R	LDB D36	
0227	06146	062757R	LSEN7 LDA CTEST	GET LIST TYPE
0228	06147	053730R	CPA B123	IS IT SOURCE?(S)
0229	06150	027556R	JMP SLIST	YES GO ON TO SOURCE PROCESSOR
0230	06151	062745R	LDA LNBUF	
0231	06152	016256R	JSB LSTIO	PRINT THE ENTRY INFO LINE
0232	06153	126035R	JMP LSENT,I	RETURN
0233	06154	011413R	FWPRG DEF INBUF+14	START LOCN OF ADDRESS SECTION
0234*				
0235*				* SET UP AN OCTAL ADDRESS AND STORE IT IN INBUF *
0236*				
0237	06155	000000	ADSET NOP	
0238	06156	073600R	STA TEMP	
0239	06157	036214R	ISZ STEST	
0240	06160	006400	CLB	
0241	06161	162214R	LDA STEST,I	GET NUMBER TO BE CONVERTED
0242	06162	016436R	JSB .,RRL	POSITION FOR 1-DIGIT CNOCT
0243	06163	177762	DEC -14	
0244	06164	016202R	JSB CNOCT	CONVERT UPPER DIGITS TO OCTAL
0245	06165	012212R	AND ANVAL	BLANK UPPER DIGIT IF :LIST
0246	06166	173600R	STA TEMP,I	STORE HIGH ORDER DIGITS
0247	06167	037600R	ISZ TEMP	
0248	06170	002400	CLA	
0249	06171	016202R	JSB CNOCT	CONVERT MIDDLE DIGITS TO OCTAL
0250	06172	173600R	STA TEMP,I	
0251	06173	037600R	ISZ TEMP	
0252	06174	002400	CLA	
0253	06175	016202R	JSB CNOCT	CONVERT LOWER DIGITS TO OCTAL
0254	06176	173600R	STA TEMP,I	STORE LOW ORDER DIGITS
0255	06177	063600R	LDA TEMP	
0256	06200	002004	INA	SET A FOR EXIT
0257	06201	126155R	JMP ADSET,I	
0258*				
0259	06202	000000	CNOCT NOP	
0260	06203	016436R	JSB .,RRL	SHIFT 3 DIGITS FROM B TO A

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0261	06204	177775	DEC	-3	
0262	06205	001722	ALF,	RAL	POSITION IN A
0263	06206	016436R	JSB	..RRL	SHIFT NEXT 3 DIGITS FROM B TO A
0264	06207	177775	DEC	-3	
0265	06210	032556R	IOR	A00	INCLUDE UPPER AND LOWER ASCII 0
0266	06211	126202R	JMP	CNOCT,I	
0267*					
0268	06212	000000	ANVAL	NOP	
0269	06213	000000	LSTLN	NOP	LOG,UNIT IN HERE
0270	06214	000000	STEST	NOP	TEMP FOR ENTRY POINTER
0271	06215	000000	SKNTR	NOP	SECTOR COUNTER FOR STRAK
0272	06216	000000	STLEN	NOP	STATEMENT LENGTH
0273	06217	052040	UPT	OCT 52040	
0274	06220	020377	B2037	OCT 20377	
0275	06221	052000	B52K	OCT 52000	
0276	01574		D32	EQU 840	32

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0278* *****
0279* * STRAK = ADD 'A' SECTORS TO TRACK/SECTOR 'B'. *
0280* * ON EXIT 'B' = NEW TRACK/SECTOR. *
0281* * ERROR: IF NO TRACKS LEFT, MESSG THEN ABORT. *
0282* *****
0283 06222 000000 STRAK NOP
0284 06223 002003 SZA,RSS A = 0
0285 06224 126222R JMP STRAK,I YES = TAKE IMMEDIATE EXIT
0286 06225 003004 CMA,INA
0287 06226 072215R STA SKNTR SKNTR = -NO. OF SECTORS
0288 06227 077765R STB STKTS STKTS = CURR.TRACK/SECTOR
0289 06230 037765R STRK1 ISZ STKTS
0290 06231 063765R LDA STKTS
0291 06232 010075 AND B1774
0292 06233 070001 STA B SAVE TRACK#
0293 06234 023765R XOR STKTS ISOLATE SECTOR#
0294 06235 050116 CPA SECTR END OF TRACK?
0295 06236 063235R LDA B400 =YES, SET TO BUMP TRACK#
0296 06237 040001 ADA B
0297 06240 073765R STA STKTS SET NEW TRACK/SECTOR
0298 06241 060001 LDA B
0299 06242 001727 ALF,ALF
0300 06243 017261R JSB CKTRK CHECK IF STILL ON DISC
0301 06244 036215R ISZ SKNTR NO = ALL SECTORS ADDED?
0302 06245 026230R JMP STRK1 NO = GO ADD IN ANOTHER
0303 06246 067765R LDB STKTS B=NEW TRK/SECTR
0304 06247 126222R JMP STRAK,I RETURN
0305*
0306 06250 000000 UPDVC NOP
0307 06251 160206 LDA EQT4,I GET DEVICE STATUS WORD
0308 06252 001423 ALR,RAR AND CLEAR AVAILABILITY BITS
0309 06253 064206 LDB EQT4
0310 06254 016430R JSB EXSET SET DEVICE AVAILABLE
0311 06255 126250R JMP UPDVC,I
0312*
0313* *****
0314* * LSTIO = OUTPUT LIST INFORMATION OF SPECIFIED LUN*
0315* * A = LOCATION OF BUFFER *
0316* * B = BUFFER LENGTH *
0317* *****
0318 06256 000000 LSTIO NOP
0319 06257 072274R STA LSTBF SET BUFFER LOCATION
0320 06260 077760R STB LSTBL SET BUFFER LENGTH
0321 06261 007400 LST05 CCB B = -1 (FOR OUTPUT LUN)
0322 06262 062213R LDA LSTLN
0323 06263 073647R STA SAVEA
0324 06264 017626R JSB DSCLU
0325 06265 017506R JSB LUCHK CHECK LUN STATUS
0326 06266 017634R JSB NULCK LUN NULL?
0327 06267 126256R JMP LSTIO,I YES, RETURN
0328 06270 016001X JSB EXEC
0329 06271 006276R DEF ++5
0330 06272 000051 DEF ,=2 =2 = WRITE
0331 06273 006213R DEF LSTLN LOGICAL UNIT #
0332 06274 006274R LSTBF DEF * BUFFER
0333 06275 005760R DEF LSTBL BUFFER LENGTH

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0334* *****
0335 06276 013574R AND B40
0336 06277 002103 CLE,SZA,RSS END OF TAPE?
0337 06300 126256R JMP LST10,I NO = END OF OUTPUT
0338 06301 016250R JSB UPDVC SET DEVICE AVAILABLE
0339 06302 064057 LDB ,+4 YES = PRINT MESSAGE
0340 06303 062332R LDA TEND
0341 06304 016744R JSB ERRDG "END OF TAPE"
0342 06305 062214R LDA STEST GET EQUIP. TYPE
0343 06306 050055 CPA ,+2 PT PUNCH?
0344 06307 026320R JMP LST10 YES
0345 06310 062213R LDA LSTLN NO = MAG. TAPE
0346 06311 042331R ADA B500
0347 06312 073600R STA TEMP
0348 06313 016001X JSB EXEC PERFORM REWIND AND UNLOAD
0349 06314 006317R DEF **3
0350 06315 000056 DEF ,+3
0351 06316 003600R DEF TEMP
0352 06317 026321R JMP **2
0353 06320 016713R LST10 JSB LEADR OUTPUT PT TRAILER
0354 06321 016250R JSB UPDVC SET DEVICE AVAILABLE
0355 06322 016001X JSB EXEC
0356 06323 006325R DEF **2 PAUSE HERE
0357 06324 000062 DEF ,+7
0358 06325 062214R LDA STEST
0359 06326 050055 CPA ,+2 PT PUNCH BEING USED?
0360 06327 016713R JSB LEADR YES = OUTPUT LEADER
0361 06330 026261R JMP LST05 GO AND CONTINUE.
0362 06331 000500 B500 OCT 500
0363 06332 006333R TEND DEF **1
0364 06333 052101 ASC 4,TAPE END
0365* *****

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0367* *****
0368* * DUMP - DUMP PART OR ALL OF THE CONTENTS *
0369* * OF A USER FILE. *
0370* * FORMAT: 'DUMP,LUN,FILENAME(,SEC1(,SEC2))' *
0371* * - LUN IS ANY OUTPUT DEVICE *
0372* * - SEC1 = 1ST SECTOR TO BE DUMPED *
0373* * - SEC2 = LAST SECTOR TO BE DUMPED *
0374* * IF FILE LENGTH IS NOT SPECIFIED, *
0375* * THE ENTIRE FILE WILL BE DUMPED. *
0376* * - ASCII FILES ARE PRINTED OR PUNCHED *
0377* * IN ASCII *
0378* * - BINARY FILES WILL BE CONVERTED TO *
0379* * ASCII(8 WORDS/LINE) IF THEY ARE TO *
0380* * BE DUMPED ON A LIST DEVICE. *
0381* *****
0382 06337 016515R DUMP JSB ASCDC GO GET LUN PARAMETER
0383 06340 026126R JMP PMISS ERROR = 'PARAM. MISSING'
0384 06341 037232R ISZ PMLOC BUMP PARAM COUNTER
0385 06342 072213R STA LSTLN SAVE LUN
0386 06343 017651R JSB USERD GO SEARCH FOR FILENAME
0387 06344 026126R JMP PMISS NONE THERE - ERROR EXIT
0388 06345 002103 CLE,SZA,RSS NAME PRESENT?
0389 06346 026275R JMP RUN2 NO, ERROR EXIT
0390 06347 040055 ADA .+2 BUMP POINTER TO TYPE
0391 06350 073565R STA MLOCN
0392 06351 160000 LDA A,I
0393 06352 010073 AND B177 MASK IN TYPE
0394 06353 072764R STA ENTYP SAVE IT
0395 06354 037565R ISZ MLOCN
0396 06355 163565R LDA MLOCN,I
0397 06356 073566R STA CURTS CURTS=TRK/SECTOR OF ENTRY
0398 06357 037565R ISZ MLOCN
0399 06360 163565R LDA MLOCN,I
0400 06361 072014R STA ENTLN
0401 06362 016515R JSB ASCDC GO PROCESS SECTOR PARAMETER
0402 06363 026416R JMP DMP02 NO SECTOR PARAMETER IN STATEMENT
0403 06364 002003 SZA,RSS FIRST SECTOR = 0?
0404 06365 027676R JMP SLSTE LIMIT ERROR
0405 06366 073307R STA NVALU SAVE VALUE OF 1ST SECTOR PARAMET
0406 06367 003004 CMA,INA
0407 06370 073306R STA MVALU SAVE -LOWER LIMIT
0408 06371 042014R ADA ENTLN
0409 06372 002020 SSA LOWER LIMIT BEYOND FILE?
0410 06373 027676R JMP SLSTE YES = LIMIT ERROR
0411 06374 037232R ISZ PMLOC
0412 06375 063307R LDA NVALU GET FIRST SECTOR VALUE
0413 06376 040052 ADA .-1
0414 06377 067566R LDB CURTS GET CURRENT TRK/SEC OF FILE.
0415 06400 016222R JSB STRAK ADD SECTOR=1 TO CURTS
0416 06401 077566R STB CURTS CURTS=START OF DUMP(TRACK/SECTR)
0417 06402 016515R JSB ASCDC PROCESS UPPER SECTOR LIMIT
0418 06403 062014R LDA ENTLN MISSING = USE SECTOR LENGTH
0419 06404 073307R STA NVALU SAVE UPPER LIMIT
0420 06405 003004 CMA,INA
0421 06406 042014R ADA ENTLN
0422 06407 002020 SSA UPPER LIMIT BEYOND FILE?

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0423	06410	027676R	JMP SLSTE	YES = LIMIT ERROR
0424	06411	063306R	LDA MVALU	
0425	06412	043307R	ADA NVALU	
0426	06413	002020	SSA	LOWER LIMIT BEYOND UPPER LIMIT?
0427	06414	027676R	JMP SLSTE	YES = LIMIT ERROR
0428	06415	002005	INA, RSS	1+NVALU=MVALU
0429	06416	062014R	DMP02 LDA ENTLN	
0430	06417	003004	CMA, INA	
0431	06420	072014R	STA ENTLN	ENTLN = (# OF SECTORS)
0432	06421	007400	CCB	SET B FOR OUTPUT STATE
0433	06422	062213R	LDA LSTLN	
0434	06423	073647R	STA SAVEA	
0435	06424	017634R	JSB NULCK	LUN NULL?
0436	06425	026311R	JMP RNS	YES, RETURN
0437	06426	062213R	LDA LSTLN	
0438	06427	017506R	JSB LUCKK	
0439	06430	066213R	LDB LSTLN	
0440	06431	054057	CPB .+4	IS THIS LUN 4(PUNCH UNIT?)
0441	06432	060055	LDA .+2	=YES, SET EQ TYPE = 2
0442	06433	054057	CPB .+4	LUN# = 4(PUNCH UNIT)?
0443	06434	044067	ADB D64	=YES, SET BIN. BIT
0444	06435	076213R	STB LSTLN	
0445	06436	072214R	STA STEST	
0446	06437	050055	CPA .+2	PAPER TAPE OUT?
0447	06440	016713R	JSB LEADR	YES = PUNCH LEADER
0448	06441	066764R	LDB ENTYP	
0449	06442	054064	CPB .+9	ASCII SOURCE (=11B)
0450	06443	026474R	JMP DUMPC	YES = GO PROCESS IT
0451	06444	056750R	CPB D11	ASCII DATA? (=B13)
0452	06445	026665R	JMP DUMPA	YES = GO PROCESS
0453	06446	062214R	LDA STEST	
0454	06447	002002	SZA	TTY?
0455	06450	050060	CPA .+5	TTY?
0456	06451	026551R	JMP DUMPL	YES
0457	06452	052664R	CPA B26	TERMINET?
0458	06453	026551R	JMP DUMPL	YES = GO LIST
0459	06454	050065	CPA .+10	LINE PRINTER(=12B)?
0460	06455	026551R	JMP DUMPL	YES
0461	06456	054063	CPB .+8	RELOC BINARY DUMP? (=B10)
0462	06457	026633R	JMP DUMPR	YES
0463	06460	056521R	CPB B14	ABS. BINARY DUMP (=B14)?
0464	06461	026631R	JMP DUMPX	
0465*				
0466*			*****	
0467*			* DUMP) - OUTPUT BINARY DATA TO DEVICE *	
0468*			* OTHER THAN PUNCH OR LIST. *	
0469*			*****	
0470	06462	017477R	DUMPD JSB RSECT	READ A SECTOR TO INBUF
0471	06463	062745R	LDA LNBUF	
0472	06464	064067	LDB D64	FOR 64 WORDS
0473	06465	016256R	JSB LSTIO	OUTPUT TO SPECIFIED LUN
0474	06466	062745R	LDA LNBUF	
0475	06467	040067	ADA D64	
0476	06470	064067	LDB D64	
0477	06471	016256R	JSB LSTIO	
0478	06472	016702R	JSB DMTST	TEST FOR COMPLETION

PAGE 0086 #07 DUMP SPECIFIED USER FILES

0479 06473 026462R

JMP DUMPD

GO BACK FOR NEXT SECTOR

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0481* *****
0482* * DUMPC = DUMP SOURCE STATEMENT FILE *
0483* *****
0484 06474 062745R DUMPC LDA LNBUF
0485 06475 073565R STA MLOCN SET MLOCN=START OF SECTOR BUFFER
0486 06476 062743R LDA RT,LF
0487 06477 072762R STA BUFFER-1 SET UP FOR POSSIBLE RETURN/LNFD
0488 06500 017477R JSB RSECT READ 1ST SECTOR OF SET
0489 06501 163565R LDA MLOCN,I SEARCH FOR 1ST RECORD IN SECTOR
0490 06502 010074 AND B377 MASK OUT UPPER 1/2 WORD
0491 06503 002003 SZA,RSS IS IT A RECORD WORD COUNT?
0492 06504 026507R JMP DMPC1 YES, GO START DUMP.
0493 06505 037565R ISZ MLOCN NO, BUMP TO NEXT WORD IN SECTOR
0494 06506 026501R JMP *-5 GO CHECK AGAIN
0495 06507 063374R DMPC1 LDA BLNKS SET 1ST 6 WORDS OF 'BUFFER'=BLANK
0496 06510 072764R STA BUFFER+1
0497 06511 072765R STA BUFFER+2
0498 06512 072766R STA BUFFER+3
0499 06513 072767R STA BUFFER+4
0500 06514 072770R STA BUFFER+5
0501 06515 017335R JSB DISCR GET A STATEMENT
0502 06516 026540R JMP DMPC4 END-OF-FILE OR LAST SECTOR EXIT.
0503 06517 072216R DMPC2 STA STLEN ON NORMAL EXIT A=STLEN
0504 06520 062213R LDA LSTLN
0505 06521 001727 ALF,ALF
0506 06522 001626 ELA,ELA IF E=1 A PUNCH IS USED
0507 06523 066216R LDB STLEN
0508 06524 063351R LDA BFFAD SET PARAMETERS FOR DUMPING
0509 06525 002040 SEZ
0510 06526 040052 ADA, *-1 MOVE ORIGIN BACK 1
0511 06527 006003 SZB,RSS WAS THIS AN END OF FILE?
0512 06530 026546R JMP DMPCX YES, GO TEST FOR PT OUTPUT
0513 06531 002040 SEZ
0514 06532 006004 INB ADD 1 TO BUFFER LENGTH
0515 06533 016256R JSB LSTIO DUMP HERE
0516 06534 062014R LDA ENTLN
0517 06535 002003 SZA,RSS WAS LAST SECTOR PASSED?
0518 06536 026517R JMP DMPC2 YES = GO ACT LIKE END OF FILE.
0519 06537 026507R JMP DMPC1 GO GET NEXT STATEMENT
0520 06540 002003 DMPC4 SZA,RSS END OF FILE FROM DISCR?
0521 06541 026517R JMP DMPC2 YES (A=0)
0522 06542 063267R LDA TERMS GET INPUT WORD COUNT
0523 06543 002003 SZA,RSS END OF STATE. AND END OF SECTOR?
0524 06544 026517R JMP DMPC2 YES.
0525 06545 027401R JMP DWD4 NO, GO BACK TO FINISH STATEMENT.
0526 06546 006044 DMPCX SEZ,INB WAS THE PUNCH USED?
0527 06547 016256R JSB LSTIO YES, GO OUTPUT THE RETURN/LNFEED
0528 06550 026707R JMP DMTSX GO TO DUMP FINALIZER.
0529*
0530* *****
0531* * DUMPL = CONVERT BINARY INFO. TO *
0532* * ASCII AND DUMP ON LIST LUN *
0533* *****
0534 06551 002400 DUMPL CLA
0535 06552 072215R STA SKNTR INITIALIZE SECTOR COUNTER
0536 06553 036215R DMPLA ISZ SKNTR BUMP SECTOR COUNTER

```

PAGE 0088 #07 DUMP SPECIFIED USER FILES

0537 06554 017477R
0538 06555 016560R
0539 06556 016702R
0540 06557 026553R

JSB RSECT
JSB DMPSC
JSB DMTST
JMP DMPL0

GET A SECTOR TO INPUT BUFFER

CHECK FOR FINISH
NO = DO ANOTHER

```

0542* *****
0543* * DMPSC - DUMP SECTOR 'SKNTR' FROM THE DISC TO *
0544* *          L.U.N. 'LSTLN' IS ASCII(OCTAL)FORMAT *
0545* *****
0546 06560 000000 DMPSC NOP
0547 06561 063235R LDA DM16
0548 06562 072770R STA INLEN SET MASTER(I.E. LINE) CNTR = 16
0549 06563 007400 CCB
0550 06564 076212R STB ANVAL SET MASK VALUE TO -1
0551 06565 062745R LDA LNBUF
0552 06566 040052 ADA .-1
0553 06567 072214R STA STEST SET STEST TO ORG OF INPUT BUFF-1
0554 06570 062215R LDA SKNTR
0555 06571 016525R JSB CNDEC CONVERT SECTOR # TO ASCII
0556* *****
0557 06572 016436R JSB .,RRL
0558 06573 177770 DEC -8
0559* *****
0560 06574 043235R ADA BM20 SET A(LOWER)=BLANK (B=20)
0561 06575 077575R DMPL2 STB INBUF+128 SET 1ST 2 CHARS OF LINE
0562 06576 073576R STA INBUF+129
0563 06577 060043 LDA .-8
0564 06600 072760R STA CDCNT SET NUMBERS(8) PER LINE
0565 06601 062763R LDA DNBUF
0566 06602 040056 ADA .+2
0567 06603 016155R DMPL3 JSB ADSET CONVERT AND STORE A WORD
0568 06604 067374R LDB BLNKS OUTPUT A WORD TO OUTPUT BUFFER
0569 06605 174000 STB A,I SET BLANK FOLLOWING
0570 06606 002004 INA BUMP STORAGE POINTER
0571 06607 036760R ISZ CDCNT HAVE WE FINISHED 8 WORDS?
0572 06610 026603R JMP DMPL3 NO
0573 06611 062763R LDA DNBUF YES, GET SET FOR OUTPUT
0574 06612 066744R LDB D34
0575 06613 016256R JSB LSTIO OUTPUT A LINE OF 8 WORDS OF DISC
0576 06614 063374R LDA BLNKS GET BLANKS FOR LINES FOLLOWING
0577 06615 067374R LDB BLNKS 1ST ONE OF A SECTOR
0578 06616 036770R ISZ INLEN HAVE WE FINISHED A SECTOR?
0579 06617 026575R JMP DMPL2 NO
0580*
0581* * EXECUTE A LINE SPACE *
0601*
0602 06620 062213R LDA LSTLN
0603 06621 042745R ADA B1100 1100B
0604 06622 073600R STA TEMP SET CONWD
0605 06623 016001X JSB EXEC
0606 06624 006630R DEF **4
0607 06625 000050 DEF .-3
0608 06626 003600R DEF TEMP
0609 06627 000054 DEF .+1
0610 06630 126560R JMP DMPSC,I
0611*
0612* *****
0613* * DUMPX - DUMP ABSOLUTE BINARY RECORDS *
0614* *****
0615 06631 006404 DUMPX CLB,INB SET ABS. BIN. FLAG
0616 06632 076752R STB ABINF

```

```

0017*
0018*
0019*
0020*
0021 06633 062213R DUMPR LDA LSTLN
0022 06634 030067 IOR 064 SET BINARY BIT
0023 06635 072213R STA LSTLN
0024 06636 063306R LDA MVALU
0025 06637 002002 SZA DUMPING ENTIRE FILE?
0026 06640 026462R JMP DUMPD NO - GO DUMP BY SECTORS
0027 06641 062014R LDA ENTLN
0028 06642 040052 ADA .-1
0029 06643 072014R STA ENTLN INCREASE # OF SECTORS BY 1
0030 06644 072751R STA RBINF SET 'RELOC. BIN.' FLAG
0031 06645 062763R DMPR1 LDA DNBUF
0032 06646 073565R STA MLOCN SET MLOCN TO START A DISC READ
0033 06647 017335R DMPR2 JSB DISCR READ A RECORD
0034 06650 026660R JMP DMPR4 END OF FILE RETURN
0035 06651 066216R LDB STLEN NO
0036 06652 062752R LDA ABINF ABSOLUTE BINARY?
0037 06653 002002 SZA
0038 06654 044056 ADB .+3 YES, FIX UP REC. LEN
0039 06655 063351R LDA BFFAD
0040 06656 016256R JSB LSTIO
0041 06657 026647R JMP DMPR2
0042*
0043 06660 062014R DMPR4 LDA ENTLN
0044 06661 002003 SZA,RSS END OF DESIRED SECTOR COUNT?
0045 06662 026707R JMP DMTSX YES - GO TO LEADER/TRAILER EXIT
0046 06663 026645R JMP DMPR1 GO START NEXT JOB
0047 06664 000026 826 OCT 26 DUR# FOR TERMINET
0048*
0049*
0050*
0051*
0052 06665 017477R DUMPA JSB RSECT READ A SECTOR TO INBUF
0053*
0054 06666 060047 LDA .-4 4 LOOP COUNTER
0055 06667 072746R STA HSBUF
0056 06670 062745R LDA LNBUF START LOCATION OF BUFFER
0057 06671 072713R DUMPB STA LEADR TEMP HOLD FOR NEXT BUFFER ADD
0058 06672 067574R LDB D32 OUTPUT 32 WORDS 4 TIMES
0059 06673 016256R JSB LSTIO OUTPUT LIST INFO ON SPEC LUN
0060 06674 062713R LDA LEADR LOCATION OF BUFFER
0061 06675 043574R ADA D32
0062 06676 036746R ISZ HSBUF 4 LOOPS?
0063 06677 026671R JMP DUMPB NO
0064 06700 016702R JSB DMTST YES: TEST FOR COMPLETION
0065*
0066 06701 026665R JMP DUMPA GET ANOTHER SECTOR
0067*
0068*
0069*
0070*
0071 06702 000000 DMTST NOP
0072 06703 036014R ISZ ENTLN DONE ?

```

```

0073 06704 126702R      JMP DMTST,I    NO = RETURN
0074 06705 002400      CLA
0075 06706 073256R      STA TRFLG
0076 06707 062214R DMTSX LDA STEST
0077 06710 050055      CPA .+2          PAPER TAPE PUNCH?
0078 06711 016713R      JSB LEADR       YES = OUTPUT TRAILER
0079 06712 026311R      JMP RNS        EXIT FROM DUMP HERE
0080*
0081*
0082*
0083*
0084 06713 000000      LEADR NOP
0085 06714 062213R      LDA LSTLN
0086 06715 010072      AND B77          ISOLATE LUN
0087 06716 042741R      ADA B1000      1000B
0088 06717 073471R      STA DRTMP
0089 06720 016001X MTLDR JSB EXEC
0090 06721 006724R      DEF .+3
0091 06722 000050      DEF .-3
0092 06723 007471R      DEF DRTMP
0093 06724 126713R      JMP LEADR,I
0094*
0095 06725 062747R MTEOF LDA DFRNS
0096 06726 072713R      STA LEADR
0097 06727 016515R      JSB ASCDC
0098 06730 060063      LDA .+8
0099 06731 017626R      JSB DSCLU
0100 06732 030067      IOR D64
0101 06733 073471R      STA DRTMP
0102 06734 073647R      STA SAVEA
0103 06735 017506R      JSB LUCKK
0104 06736 017634R      JSB NULCK      LUN NULL?
0105 06737 026311R      JMP RNS        JUST RETURN.
0106 06740 026720R      JMP MTLDR
0107*
0108 06741 001000      B1000 OCT 1000
0109 06742 037400      EQP OCT 37400   UPPPER = SIGN
0110 06743 006412      RT.LF OCT 6412   CARRIAGE RETRN/LINE FEED
0111 03235             BM20 EQU DM16    -20B
0112 06744 000042      D34 DEC 34
0113 06745 001100      B1100 OCT 1100
0114 06746 011435R HSBUF DEF INBUF+32
0115 06747 000311R DFRNS DEF RNS
0116 06750 000013      D11 DEC 11
0117 06751 000000      RBINF NOP
0118 06752 000000      ABINF NOP
0119 06753 002010      B2010 OCT 2010

```

NON ZERO WHEN REL.BIN. IS PROCSD
NON=ZERO WHEN ABS. BIN. IS PROC


```

0121* *****
0122* * DDUMP - DUMP SYSTEM AREA, ALL OR PART OF USER *
0123* * AREA, OR ENTIRE DISC TO USER DISC *
0124* * SPECIFIED BY SUBSEQUENT ':UP' DIRECTIVE. *
0125* * FORMAT - ':DDUMP,X' - DUMP SYSTEM AREA *
0126* * ':DDUMP,U[,FILE1,(FILEA),FILE2,...]' *
0127* * - DUMP SPECIFIED USER FILES, *
0128* * OPTIONALLY RENAMING FILE1 TO FILEA *
0129* * IF NO FILE PARAMETER ARE PRESENT, *
0130* * THE ENTIRE USER AREA IS DUMPED. *
0131* * ':DD' - THE ENTIRE DISC IS DUMPED *
0132* * NOTE - IN A USER AREA DUMP, THE SOURCE USER FILES *
0133* * ARE ADDED TO THE USER AREA ON THE *
0134* * DESTINATION DISC. DUPLICATE FILENAMES ARE *
0135* * REPORTED AND REJECTED. *
0136* * IN AN ENTIRE DISC DUMP, NO CHECKING IS *
0137* * DONE. *
0138* *****
0139 06754 060056 DDUMP LDA .+3
0140 06755 067351R LDB BFFAD
0141 06756 017430R JSB CODIN READ CODE SEG. INTO BUFFER
0142 06757 026763R JMP BUFFER
0143*
0144 06760 000000 BSS 3 ALLOW BUFFER-3 REFERENCE
0145 06763 BUFFER EQU *
0146* *****
0147*
0148* CAUTION: BEFORE MAKING ANY CHANGES IN THE NEXT 128 WORDS
0149* OF CODING, MAKE SURE YOU UNDERSTAND THE
0150* IMPLICATIONS OF THE EXTENT OF "BUFFER".
0151*
0152* *****
0153*
0154 06763 064161 LDB CUDSC
0155 06764 077463R STB OLDSC
0156 06765 077475R STB SC2
0157 06766 067171R LDB PMCNT
0158 06767 006003 SZB,RSS
0159 06770 027146R JMP DDALL
0160 06771 017774R JSB TYPES
0161 06772 053541R CPA B130
0162 06773 027145R JMP DDSYS
0163 06774 064115 LDB SY8BF
0164 06775 044075 ADB B1774
0165 06776 053540R CPA B125
0166 06777 006005 INB,RSS
0167 07000 026741R JMP PILLG
0168*
0169 07001 077457R STB SAVDD
0170 07002 077466R STB DDT9
0171 07003 063314R LDA EDTAD
0172 07004 073426R STA DDIBF
0173 07005 073423R STA DDOBF
0174 07006 073467R STA DRCUR SET DRCTRY POINTERS
0175 07007 073470R STA DRNXT FOR BUFFER
0176 07010 017625R JSB PMNXT

```

0177	07011	002003		SZA,RSS	DUMP ENTIRE USER AREA?
0178	07012	027075R		JMP DDUAL	-YES
0179	07013	007400		CCB	SET FLAG TO ACCEPT ONLY SRC NAME
0180	07014	077472R		STB RNFLG	
0181	07015	067477R		LDB LUN2	
0182	07016	077464R		STB DDLUN	
0183	07017	000065	DDU10	CLE,ERA	
0184	07020	160000		LDA A,I	
0185	07021	002040		SEZ	
0186	07022	001727		ALF,ALF	SOURCE NAME?
0187	07023	010075		AND B1774	-NO, GO RENAME LAST SOURCE
0188	07024	053602R		CPA ULPAR	
0189	07025	027102R		JMP DDRNM	
0190	07026	167232R		LDB PMLOC,I	GO LOOK FOR FILE IN USER DRCTRY
0191	07027	017625R		JSB PMNXT	WAS IT THERE?
0192	07030	017501R		JSB DIRSR	-YES
0193	07031	000773R		DEF USDIR	-NO, PRINT *FILE UNDEFINED*
0194	07032	002102		CLE,SZA	SET FLAG TO IGNORE RENAME
0195	07033	027043R		JMP DDU30	MORE PARAMS?
0196	07034	017117R		JSB FNUND	-NO
0197	07035	006404		CLB,INB	-YES
0198	07036	077472R		STB RNFLG	
0199	07037	017625R	DDU20	JSB PMNXT	
0200	07040	002003		SZA,RSS	
0201	07041	027140R		JMP DDUXT	
0202	07042	027017R		JMP DDU10	
0203*					
0204	07043	006400	DDU30	CLB	SET FLAG TO ACCEPT ANYTHING
0205	07044	077472R		STB RNFLG	
0206	07045	073473R		STA DRADR	COMPUTE ENTRY LENGTH
0207	07046	017402R		JSB DRADD	SAVE DRCTRY ENTRY LENGTH
0208	07047	077063R		STB DRLNG	UPDATE ENTRY ADDR8 POINTER
0209	07050	063470R		LDA DRNXT	SET NEXT EFF. ENTRY ADDR8
0210	07051	073467R	DDU35	STA DRCUR	
0211	07052	047467R		ADB DRCUR	
0212	07053	077470R		STB DRNXT	WILL CURRENT O/F SECTOR
0213	07054	007000		CMB	-YES, GO COMPLETE THIS SECTOR
0214	07055	047316R		ADB EDTND	
0215	07056	006020		SSB	
0216	07057	027065R		JMP DDU40	
0217	07060	063473R		LDA DRADR	
0218	07061	067467R		LDB DRCUR	
0219	07062	017047R		JSB WMOVE	
0220	07063	000000	DRLNG	NOP	GO LOOK FOR MORE FILES
0221	07064	027037R		JMP DDU20	
0222*					
0223	07065	003400	DDU40	CCA	SET END-OF-SECTOR MARK
0224	07066	173467R		STA DRCUR,I	
0225	07067	064055		LDB .+2	OUTPUT DRCTRY SECTOR
0226	07070	017413R		JSB DDIO	
0227	07071	073466R		STA DOTS	
0228	07072	063314R		LDA EDTAD	
0229	07073	067063R		LDB DRLNG	
0230	07074	027051R		JMP DDU35	
0231*					
0232	07075	063500R	DDUAL	LDA LUN3	

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0233 07076 073464R STA DDLUN
0234 07077 062773R LDA USDIR
0235 07100 073467R STA SAVDD
0236 07101 027143R JMP DDUXX
0237 07102 067472R DDRNM LDB RNFLG
0238 07103 003400 CCA
0239 07104 073472R STA RNFLG
0240 07105 006020 SSB
0241 07106 026741R JMP PILLG
0242 07107 006003 SZB,RSS
0243 07110 027113R JMP ++3
0244 07111 037232R ISZ PMLOC
0245 07112 027037R JMP DDU20
0246 07113 067467R LDB DRCUR
0247 07114 063374R LDA BLNKS
0248 07115 170001 STA B,I
0249 07116 006004 INB
0250 07117 170001 STA B,I
0251 07120 006004 INB
0252 07121 160001 LDA B,I
0253 07122 010074 AND B377
0254 07123 032203R IOR UBLNK
0255 07124 170001 STA B,I
0256 07125 167232R LDB PMLOC,I
0257 07126 006004 INB
0258 07127 077136R STB DDRMV
0259 07130 017625R JSB PMNXT
0260 07131 001666 ELA,CLE,ERA
0261 07132 040051 ADA.-2
0262 07133 067467R LDB DRCUR
0263 07134 005200 RBL
0264 07135 017003R JSB MOVE
0265 07136 000000 DDRMV NOP
0266 07137 027037R JMP DDU20
0267*
0268 07140 173470R DDUXT STA DRNXT,I
0269 07141 064055 LDB .+2
0270 07142 017413R JSB DDIO
0271 07143 060055 DDUXX LDA .+2
0272 07144 027147R JMP DDALL+1
0273*
0274 07145 002405 DDSYS CLA,INA,RSS
0275*
0276 07146 060056 DDALL LDA .+3
0277 07147 073455R STA DDFLG
0278 07150 026311R JMP RNS
0279*
0280*
0281 07151 067351R ODCMP LDB BFFAD
0282 07152 077426R STB DDIBF
0283 07153 077423R STB DDDBF
0284 07154 060161 LDA CUDSC
0285 07155 073456R STA SAVSC
0286 07156 073474R STA SC1
0287*
0288 07157 067314R LDB EDTAD

```

```

SET TO ACCEPT ONLY SRC F.N
SOURCE F/NAME EXPECTED
-YES, ILLEGAL PARAMETER
LAST SOURCE UNDEFINED?
-NO, OK TO PROCESS
-YES, IGNORE THIS PARAM

```

```

MOVE F/N TO LAST ENTRY

```

```

SET END-OF DRCTRY

```

```

OUTPUT LAST DRCTRY SECTOR

```

0289	07160	060060	LDA	.,+5	
0290	07161	017430R	JSB	CODIN	READ CODE SEG. INTO EDTBF
0291*					
0292	07162	067353R	LDB	RDSYS	
0293	07163	017366R	JSB	LBLIO	READ USER LABEL SECTOR
0294*					
0295	07164		EDTBF	EQU *	
0296*					
0297	07164	063064R	LDA	SBDTR	
0298	07165	073461R	STA	SVBAD	SAVE BAD TRACK COUNT
0299	07166	063065R	LDA	SSPTR	
0300	07167	073462R	STA	SVSPR	SAVE NEXT SPARE TRACK
0301*					
0302	07170	063455R	LDA	DDFLG	
0303	07171	050056	CPA	.,+3	DUMP ENTIRE DISC?
0304	07172	027350R	JMP	DCALL	-YES
0305	07173	050054	CPA	.,+1	DUMP SYSTEM?
0306	07174	027326R	JMP	DCSYS	-YES
0307*					
0308	07175	063457R	DCU10	LDA	SAVDD
0309	07176	073466R		STA	DDTS
0310	07177	063351R		LDA	BFFAD
0311	07200	073470R		STA	DRNXT
0312	07201	063463R	DCU13	LDA	OLDSC
0313	07202	006404		CLB,	INB
0314	07203	016162R		JSB	JEXUD
0315	07204	006404		CLB,	INB
0316	07205	017413R		JSB	DD10
0317	07206	073457R		STA	SAVDD
0318	07207	017441R	DCU15	JSB	RESET
0319	07210	163470R		LDA	DRNXT,1
0320	07211	002003		SZA,	RSS
0321	07212	027360R		JMP	DDFIN
0322	07213	002020		SSA	
0323	07214	027175R		JMP	DCU10
0324	07215	063470R		LDA	DRNXT
0325	07216	017402R		JSB	DRADD
0326	07217	077471R		STB	DRTMP
0327	07220	060060		LDA	.,+5
0328	07221	067470R		LDB	DRNXT
0329	07222	005200		RBL	
0330	07223	017501R		JSB	DIRSR
0331	07224	000773R		DEF	USDIR
0332	07225	002002		SZA	
0333	07226	027267R		JMP	DDDUP
0334	07227	067470R		LDB	DRNXT
0335	07230	044055		ADB	.,+2
0336	07231	160001		LDA	B,I
0337	07232	010073		AND	B177
0338	07233	072764R		STA	ENTYP
0339	07234	006004		INB	
0340	07235	160001		LDA	B,I
0341	07236	072217R		STA	PTSEC
0342	07237	006004		INB	
0343	07240	160001		LDA	B,I
0344	07241	072014R		STA	ENTLN

GO CHECK FOR DUP FILE NAME

IS IT A DUP?

-YES

GET ENTRY TYPE

GET SRC START T/S

GET SRC FILE LENGTH (SECTORS)

0345	07242	073460R	STA	SAVLN	
0346	07243	064157	LDB	UDNTS	
0347	07244	076765R	STB	ENTSC	SAVE DEST. START T/S
0348	07245	076766R	STB	NEWTS	
0349	07246	016222R	JSB	STRAK	COMPUTE UDNTS BEYOND THIS FILE
0350	07247	017311R	JSB	DDXFR	
0351*					
0352	07250	017441R	JSB	RESET	
0353	07251	063460R	LDA	SAVLN	
0354	07252	072014R	STA	ENTLN	
0355	07253	016774R	JSB	DCSTR	-YES, ADD FILE TO USER DRCTRY
0356	07254	063567R	LDA	NMBUF-1	
0357	07255	064056	LDB	+.3	
0358	07256	016744R	JSB	ERRDG	PRINT FILE NAME
0359	07257	067471R	DCULP	LDB	
0360	07260	047470R	ADB	DRNXT	
0361	07261	077470R	STB	DRNXT	SET ADDR8 OF NEXT ENTRY
0362	07262	007000	CMB		
0363	07263	047476R	ADB	BFEND	
0364	07264	006020	SSB		
0365	07265	027175R	JMP	DCU10	
0366	07266	027201R	JMP	DCU13	
0367*					
0368	07267	063567R	DDUP	LDA	NMBUF-1
0369	07270	064056	LDB	+.3	
0370	07271	016744R	JSB	ERRDG	PRINT FILE NAME
0371	07272	062075R	LDA	STERR	
0372	07273	064064	LDB	+.9	
0373	07274	016744R	JSB	ERRDG	PRINT *DUPLICATE FILE NAME*
0374	07275	027257R	JMP	DCULP	
0375*					
0376	07276	000000	SWPSC	NOP	
0377	07277	063475R	LDA	SC2	
0378	07300	067474R	LDB	SC1	
0379	07301	073474R	STA	SC1	
0380	07302	077475R	STB	SC2	
0381	07303	067220R	LDB	XCUSC	
0382	07304	016430R	JSB	EXSET	
0383	07305	060074	LDA	B377	
0384	07306	006004	INB		
0385	07307	016430R	JSB	EXSET	
0386	07310	127276R	JMP	SWPSC, I	
0387*					
0388	07311	000000	DDXFR	NOP	
0389	07312	016134R	JSB	MVSET	
0390	07313	062014R	DDXF1	LDA	ENTLN
0391	07314	002020	SSA		
0392	07315	127311R	JMP	DDXFR, I	
0393	07316	002003	SZA	RSS	
0394	07317	127311R	JMP	DDXFR, I	
0395	07320	017276R	JSB	SWPSC	
0396	07321	062014R	LDA	ENTLN	
0397	07322	016161R	JSB	RDTSF	READ SOURCE DISC
0398	07323	017276R	JSB	SWPSC	
0399	07324	016177R	JSB	WRTSF	WRITE DEST. DISC
0400	07325	027313R	JMP	DDXF1	

0401*						
0402	07326	016134R	DCSYS	JSB	MVSET	
0403	07327	063477R		LDA	LUN2	
0404	07330	073623R		STA	FLUN	SET LUN=SYS
0405	07331	064115		LDB	SYSBF	*
0406	07332	005727		BLF	BLF	* GET # OF SECTORS
0407	07333	017446R		JSB	MPY24	* TO TRANSFER
0408	07334	002004		INA		
0409	07335	076217R		STB	PTSEC	
0410	07336	076766R		STB	NEWTS	
0411	07337	016147R		JSB	MVTSF	DUMP SYSTEM
0412	07340	006400		CLB		
0413	07341	077375R		STB	INBUF	
0414	07342	060115		LDA	SYSBF	
0415	07343	002004		INA		
0416	07344	006404		CLB	INB	
0417	07345	017425R		JSB	WDISC	CLEAR USER DRCTRY
0418	07346	011375R		DEF	INBUF	
0419	07347	027360R		JMP	DDFIN	
0420*						
0421	07350	067265R	DCALL	LDB	D203	
0422	07351	017446R		JSB	MPY24	* COMPUTE # OF SECTORS
0423	07352	072014R		STA	ENTLN	*
0424	07353	076217R		STB	PTSEC	
0425	07354	076766R		STB	NEWTS	
0426	07355	067500R		LDB	LUN3	
0427	07356	077623R		STB	FLUN	SET LUN=USER
0428	07357	017311R		JSB	DDXFR	
0429*						
0430	07360	017441R	DDFIN	JSB	RESET	MAKE SURE DISCL OK
0431	07361	067353R		LDB	RDSYS	
0432	07362	017366R		JSB	LBLIO	READ LABEL SECTOR
0433	07363	063461R		LDA	SVBAD	
0434	07364	073064R		STA	SBDTR	SET BAD TRACK COUNT
0435	07365	063462R		LDA	SVSPR	
0436	07366	073065R		STA	SSPTR	SET NEXT SPARE TRACK
0437	07367	067455R		LDB	DDFLG	
0438	07370	060115		LDA	SYSBF	
0439	07371	043235R		ADA	B400	
0440	07372	054054		CPB	.*+1	DD,X ?
0441	07373	073063R		STA	SNXTS	-YES, SET NEXT TR/SECTR
0442	07374	067354R		LDB	WRSYS	
0443	07375	017366R		JSB	LBLIO	RESTORE USER LABEL SECTOR
0444	07376	017441R		JSB	RESET	
0445	07377	006400		CLB		
0446	07400	077455R		STB	DDFLG	CLEAR DISC DUMP FLAG
0447	07401	026311R		JMP	RNB	
0448*						
0449*						
0450	07402	000000	DRADD	NOP		
0451	07403	040055		ADA	.*+2	
0452	07404	160000		LDA	A,I	GET ENTRY TYPE
0453	07405	010073		AND	B177	
0454	07406	040045		ADA	.*+6	
0455	07407	064060		LDB	.*+5	
0456	07410	002020		SSA		11 WORD ENTRY?

```

0457 07411 044061 ADB .+6 -YES
0458 07412 127402R JMP DRADD,I
0459*
0460 07413 000000 DDIO NOP
0461 07414 063464R LDA DDLUN
0462 07415 073456R STA RWLUN
0463 07416 063466R LDA DOTS
0464 07417 004010 SLB
0465 07420 027425R JMP DORD
0466 07421 006404 CLB,INB
0467 07422 017426R JSB WDISC
0468 07423 000000 DDOBF NOP
0469 07424 127413R JMP DDIO,I
0470 07425 017415R DORD JSB RDISC
0471 07426 000000 DDIBF NOP
0472 07427 127413R JMP DDIO,I
0473*
0474* 'CODIN' READS IN OVERLAYABLE CODE SEGMENTS
0475*
0476 07430 000000 CODIN NOP
0477 07431 077437R STB CODBF
0478 07432 067477R LDB LUN2
0479 07433 077456R STB RWLUN
0480 07434 043465R ADA JOBTR
0481 07435 006404 CLB,INB
0482 07436 017415R JSB RDISC
0483 07437 000000 CODBF NOP
0484 07440 127430R JMP CODIN,I
0485*
0486 07441 000000 RESET NOP
0487 07442 063456R LDA SAVSC
0488 07443 006404 CLB,INB
0489 07444 016162R JSB JEXUD
0490 07445 127441R JMP RESET,I
0491*
0492 07446 000000 MPY24 NOP
0493 07447 007004 CMB,INB
0494 07450 002400 CLA
0495 07451 040116 ADA SECTR
0496 07452 006006 INB,SZB
0497 07453 027451R JMP *-2
0498 07454 127446R JMP MPY24,I
0499*
0500 07455 000000 DDFLG NOP
0501 07456 000000 SAVSC NOP
0502 07457 000000 SAVDO NOP
0503 07460 000000 SAVLN NOP
0504 07461 000000 SVBAD NOP
0505 07462 000000 SVSPR NOP
0506 07463 000000 OLDSC NOP
0507 07464 000000 DDLUN NOP
0508 07465 000000 JOBTR NOP
0509 07466 000000 DOTS NOP
0510 07467 000000 DRCUR NOP
0511 07470 000000 DRNXT NOP
0512 07471 000000 DRTMP NOP

```

0513	07472	000000	RNFLG	NOP
0514	07473	000000	DRADR	NOP
0515	07474	000000	SC1	NOP
0516	07475	000000	SC2	NOP
0517	07476	007163R	BFEND	DEF BUFR+128


```

0519* *****
0520* * RSECT - READ A SECTOR FROM THE DISC USER FILE *
0521* * TO INBUF *
0522* *****
0523 07477 000000 RSECT NOP
0524 07500 006404 CLB,INB B=1 (1 SECTOR)
0525 07501 063566R LDA CURTS
0526 07502 017415R JSB RDISC
0527 07503 011375R DEF INBUF
0528 07504 073566R STA CURTS SAVE NEW TRACK/SECTOR
0529 07505 127477R JMP RSECT,I RETURN TO PROGRAM
0530*
0531* *****
0532* * LUCHK - CHECK L.U.N. STATUS AND *
0533* * GET EQUIPMENT CODE. *
0534* * -ENTRY: A = L.U.N. TO BE TESTED; *
0535* * B>0(IN);B<0(OUT),B=0,EITHER *
0536* * - EXIT: A = EQUIPMENT TYPE *
0537* * B = WORD 4 OF EQT ENTRY *
0538* * -ERRORS: *
0539* * A=0 OR >LUT#, "ILLEGAL L.U.N." *
0540* * LUTBL ENTRY A=0,"LUN UNASSIGNED" *
0541* * UNIT DISABLED,"DEVICE DOWN" *
0542* * - ERROR EXIT VIA RNSX *
0543* *****
0544 07506 000000 LUCHK NOP
0545 07507 002003 SZA,RSS
0546 07510 027562R JMP LUCH3 LUN =0 (ILLEGAL LUN)
0547 07511 010072 AND B77 ISOLATE L.U.N.
0548 07512 073600R STA TEMP
0549 07513 003004 CMA,INA
0550 07514 040122 ADA LUT# CHECK LUN VS. LUN COUNT
0551 07515 002020 SSA
0552 07516 027562R JMP LUCH3 LUN > LUT#
0553 07517 062753R LDA B2010 GET SLA FORMAT
0554 07520 006003 SZB,RSS EITHER I/O
0555 07521 002400 CLA YES, SET = NOP
0556 07522 006020 SSB OUTPUT ONLY?
0557 07523 002004 INA YES, SET A = SLA,RSS
0558 07524 073560R STA LUTST
0559 07525 067600R LUCH1 LDB TEMP
0560 07526 044121 ADB LUTAB
0561 07527 044052 ADB ,-1
0562 07530 160001 LDA B,I A = EQT NUMBER
0563 07531 073615R STA EDN SAVE THE EQT#
0564 07532 002003 SZA,RSS
0565 07533 127506R JMP LUCHK,I RETURN IF NULL
0566 07534 040052 ADA ,-1
0567 07535 070001 STA B *
0568 07536 001700 ALF * MULTIPLY BY 17
0569 07537 040001 ADA B *
0570 07540 040117 ADA EQTAB
0571 07541 040056 ADA ,+3 A=LOCN OF WORD 4 OF EQT ENTRY
0572 07542 164000 LDB A,I B = CONTENTS OF WORD 4.
0573 07543 062742R LDA EQP
0574 07544 010001 AND B

```

```

0575 07545 000027 D23 DEC 23 -ALF- INSTRUCTION
0576 07546 005210 RBL,SLB
0577 07547 027552R JMP ++3
0578 07550 006020 SSB
0579 07551 027602R JMP LUCH4 "DEVICE DOWN"
0580 07552 005300 RBR
0581 07553 002002 SZA SKIP OUT IF TTY,..
0582 07554 000037 SLA,ALF I/O DEVICE(CODE 20 OR ABOVE)
0583 07555 127506R JMP LUCHK,I YES
0584 07556 050060 CPA ,+5 ALLOW 0 OR 5
0585 07557 127506R JMP LUCHK,I
0586 07560 000000 LUTST NOP TEST HERE FOR LEGAL I/O
0587 07561 127506R JMP LUCHK,I
0588 07562 064061 LUCH3 LDB ,+6 SETUP FOR "ILLEGAL LUN"
0589 07563 063565R LDA ++2
0590 07564 026130R JMP PMISS+2
0591 07565 007566R DEF ++1
0592 07566 044514 ASC 11 ILLEGAL LUN UNASSIGNED
0593 07601 007572R DEF +-7
0594 07602 063615R LUCH4 LDA EDN GET EQT#
0595 07603 016525R JSB CNDEC CONVERT IT TO DECIMAL
0596 07604 073615R STA EDN STORE IT IN LIST BUFFER
0597 07605 063610R LDA DDOWN
0598 07606 064063 LDB ,+8
0599 07607 027621R JMP LUCH6
0600 07610 007611R DDOWN DEF ++1
0601 07611 042105 ASC 8,DEVICE # DOWN
0602 07615 EDN EQU +-4 LOC OF SAVED EQT#
0603*
0604 07621 016744R LUCH6 JSB ERRDG
0605 07622 016001X JSB EXEC
0606 07623 007625R DEF ++2
0607 07624 000044 DEF , -7
0608 07625 027525R JMP LUCH1
0609*
0610 07626 000000 DSCLU NOP
0611 07627 050055 CPA ,+2
0612 07630 027562R JMP LUCH3
0613 07631 050056 CPA ,+3
0614 07632 027562R JMP LUCH3
0615 07633 127626R JMP DSCLU,I
0616*
0617*
0618* *****
0619* * NULCK: IF LUN IS NULL, I.E., ITS EQT *
0620* * ENTRY= 0, RETURN TO P+1. *
0621* * OTHERWISE RETURN TO P+2. *
0622* *****
0623 07634 000000 NULCK NOP SUBROUTINE TO CHEK IF LUN IS NULL
0624 07635 063547R LDA SAVEA LUN IS ALWAYS STORED IN SAVEA
0625 07636 010072 AND B77 GET LUN ONLY
0626 07637 002003 SZA,RSS RETURN TO P+2 IF LUN=0
0627 07640 027645R JMP NL1
0628 07641 040052 ADA , -1
0629 07642 040121 ADA LUTAB POINT TO RIGHT ENTRY
0630 07643 160000 LDA A,I GET EQT ENTRY

```

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0631 07644 002002      SZA      NULL? (#0?)
0632 07645 037634R NL1  ISZ NULCK
0633 07646 127634R      JMP NULCK,I  NO. RETURN TO P+2
0634 07647 000000  SAVEA NOP
0635*
0636* *****
0637* * SOSA = DUMP INDICATED TRACK/SECTOR IN OCTAL/ASCII *
0638* *****
0639 07650 016515R SOSA JSB ASCDC      GET TRACK #
0640 07651 026126R      JMP PMISS
0641 07652 070001      STA B
0642 07653 047705R      ADB N203
0643 07654 006021      SSB,RSS      LEGAL TRK#?
0644 07655 026741R      JMP PILLG      -NO
0645 07656 001727      ALF,ALF
0646 07657 073566R      STA CURTS
0647 07660 037232R      ISZ PMLOC
0648 07661 016515R      JSB ASCDC      GET SECTOR #
0649 07662 026126R      JMP PMISS
0650 07663 070001      STA B
0651 07664 044313      ADB M8ECT
0652 07665 006021      SSB,RSS      LEGAL SECTR#?
0653 07666 026741R      JMP PILLG      -NO
0654 07667 043566R      ADA CURTS
0655 07670 073566R      STA CURTS
0656 07671 037232R      ISZ PMLOC
0657 07672 016515R      JSB ASCDC      BUMP PARAMETER POINTER
0658 07673 002404      CLA,INA      GO CONVERT # OF SECTORES
0659 07674 003004      CMA,INA      NO COUNT, SET = 1
0660 07675 072014R      STA ENTLN      SET NEGATIVE
0661 07676 060061      LDA .+6      SET DUMP COUNTER
0662 07677 072213R      STA LSTLN
0663 07700 063172R      LDA PMTBL+2
0664 07701 037256R      ISZ TRFLG
0665 07702 053201R      CPA ASO
0666 07703 026551R      JMP DUMPL
0667 07704 026665R      JMP DUMPA
0668 07705 177465 N203 DEC -203      ON LUN 6 (LIST DEVICE)

OCTAL DUMP?
YES
NO, ASCII

```

```

0670*
0671*
0672*
0673*
0674*
0675*
0676*
0677 07706 000000 PURGE NOP
0678 07707 072772R STA ENDFL SET FLAG FOR 'P' BIT TEST
0679 07710 060200 LDA DISCL
0680 07711 043235R ADA B400
0681 07712 072217R STA PTSEC SET = USER FILE T/S
0682 07713 063500R LDA LUN3
0683 07714 073623R STA FLUN SET DISC = LUN3
0684 07715 063170R LDA PMTBL
0685 07716 073232R STA PMLOC SET START OF TRANSFER TABLE
0686 07717 177232R STB PMLOC,I
0687 07720 005421 BLR,BRS
0688 07721 076220R STB PTOTL
0689 07722 016765R JSB OPONF LOCK OUT OP. ATTN.
0690 07723 062745R LDA LNBUF
0691 07724 073233R STA JPNTR SET JPNTR = START OF NEW DIC.BF.
0692 07725 062773R LDA USDIR
0693 07726 072766R STA NEWTS NEWTS = START OF DICTIONARY TRAK
0694 07727 017624R JSB READ1 INIT CURTS/MLOCN; READ SECTOR 1,
0695*
0696 07730 063620R LDA DICAD
0697 07731 066745R LDB LNBUF PRESERVE 1ST DIRECTORY
0698 07732 017047R JSB WMOVE SECTOR FOR EFMP
0699 07733 000200 DEC 128
0700 07734 163565R PRG02 LDA MLOCN,I GET 1ST WORD OF ENTRY
0701 07735 002003 SZA,RSS NEXT INSTR, IF END OF DIREC.(=0)
0702 07736 026042R JMP PRG50 GO TO FINALIZE
0703 07737 010074 AND B377
0704 07740 002003 SZA,RSS WAS ENTRY DELETED?
0705 07741 026021R JMP PRG30 YES = GO PROCESS IT
0706 07742 067565R LDB MLOCN NO = GO GET 'P' BIT
0707 07743 044055 ADB,+2
0708 07744 077600R STB TEMP TEMP = 3RD LOCN OF ENTRY
0001 07745 160001 LDA B,I GET 3RD WORD
0002 07746 012206R AND 0200 ISOLATE 'P' BIT
0003 07747 066772R LDB ENDFL
0004 07750 006003 SZB,RSS DO WE CHECK THE 'P' BIT?
0005 07751 027754R JMP ++3 NO
0006 07752 002002 SZA YES = IS IT SET?
0007 07753 026021R JMP PRG30 YES = GO PURGE THE ENTRY
0008 07754 163232R LDA PMLOC,I
0009 07755 002021 SSA,RSS IS PMLOC SET FOR PURGE
0010 07756 027762R JMP ++4 NO
0011 07757 037232R ISZ PMLOC YES = SET TO NEXT TABLE LOCN.
0012 07760 002400 CLA
0013 07761 173232R STA PMLOC,I CLEAR NEXT TBL.LOCN.
0014 07762 037600R ISZ TEMP TEMP = LOCN OF TRK/SECTOR
0015 07763 066217R LDB PTSEC
0016 07764 177600R STB TEMP,I STORE NEW TRK/SECTOR ORG.(=B)
0017 07765 037600R ISZ TEMP TEMP = LOCN OF ENTRY LENGTH

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0018 07766 163600R LDA TEMP,I
0019 07767 143232R ADA PMLOC,I
0020 07770 173232R STA PMLOC,I
0021 07771 163600R LDA TEMP,I
0022 07772 016222R JSB STRAK
0023 07773 076217R STB PTSEC
0024 07774 063566R LDA MLOCN
0025 07775 017402R JSB DRADD
0026 07776 076014R STB ENTLN
0027 07777 047233R ADB JPNTR
0028 10000 007004 CMB,INB
0029 10001 046763R ADB DNBUF
0030 10002 006021 SSB,RSS
0031 10003 026011R JMP PRG04
0032 10004 007400 CCB
0033 10005 177233R STB JPNTR,I
0034 10006 016741R JSB NUSET
0035 10007 062745R LDA LNBUF
0036 10010 073233R STA JPNTR
0037 10011 063565R PRG04 LDA MLOCN
0038 10012 067233R LDB JPNTR
0039 10013 017047R JSB WMOVE
0040 10014 000000 ENTLN NOP
0041 10015 063233R LDA JPNTR
0042 10016 042014R ADA ENTLN
0043 10017 073233R STA JPNTR
0044 10020 026040R JMP PRG36
0045*
0046* * PROCESS A DELETED ENTRY HERE *
0047*
0048 10021 163232R PRG30 LDA PMLOC,I
0049 10022 002303 CCE,SZA,RSS
0050 10023 026031R JMP PRG32
0051 10024 002020 SSA
0052 10025 026031R JMP PRG32
0053 10026 037232R ISZ PMLOC
0054 10027 002400 CLA
0055 10030 173232R STA PMLOC,I
0056 10031 063565R PRG32 LDA MLOCN
0057 10032 040057 ADA ,+4
0058 10033 160000 LDA A,I
0059 10034 036220R ISZ PTOTL
0060 10035 143232R ADA PMLOC,I
0061 10036 001225 RAL,ERA
0062 10037 173232R STA PMLOC,I
0063*
0064 10040 017603R PRG36 JSB GETNX
0065*
0066 10041 027734R JMP PRG02

```

A = ENTRY LENGTH
 UPDATE SECTOR COUNT IN PMTBL
 AND RESTORE IT

COMPUTE NEW TRK/SECTOR ORG
 PTSEC = NEW TRK/SECTOR(NXT ENTR)
 GET LENGTH OF DICT. ENTRY
 COMPUTE DICT. ENTRY LENGTH
 B = LENGTH OF DICT. ENTRY

ROOM FOR ANOTHER ENTRY IN INBUF?
 YES -
 NO - PUT OUT THE CURRENT BUFFER
 SET END WORD (=-1)
 WRITE INBUF (NEWTS ADVANCED TOO)

JPNTR = START OF INBUF
 GET ORG OF MOVE
 GET DESTIN. OF MOVE

JPNTR = NEXT AVAIL LOCN IN INBUF

IS THIS THE FIRST FILE?
 YES
 POINTING AT A DELETE ENTRY?
 YES
 NO , BUMP TABLE POINTER
 SET NEW ENTRY SLOT = 0

MLOCN = -(ENTRY LENGTH)
 A = ENTRY LENGTH(IN SECTORS)
 SET PTOTL NON ZERO
 A = # OF SECTORES PURGED
 SET INTO TRANSFER TABLE

GET NEXT DICT.ENTRY = CURTS AND
 MLOCN SET TO NEW ENTRY VALUES.
 GO CHECK IT.

```

0068* *****
0069* * FINALIZE THE PURGE - PACK THE REMAINING USER FILES*
0070* *****
0071 10042 062220R PRG50 LDA PTOTL
0072 10043 002003      SZA,RSS
0073 10044 026120R      JMP PRG70
0074 10045 037232R      ISZ PMLOC
0075 10046 002400      CLA
0076 10047 173232R      STA PMLOC,I      SET END OF TRANSFER TABLE
0077 10050 173233R      STA JPNTR,I      SET END OF DIRECTORY
0078 10051 016741R      JSB NUSET      WRITE ON DIRECTORY TRACK
0079 10052 062766R      LDA NEWTS
0080 10053 010074      AND B377
0081 10054 002003      SZA,RSS      DRCTRY FULL?
0082 10055 026120R      JMP PRG70      -YES
0083 10056 002400      CLA
0084 10057 073375R      STA INBUF      CLEAR 1ST LOCN OF INBUF
0085 10060 063233R      LDA JPNTR
0086 10061 052763R      CPA DNBUF      WAS LAST SECTOR FILLED?
0087 10062 016741R      JSB NUSET      YES - OUTPUT INBUF AGAIN
0088 10063 062217R      LDA PTSEC      GET NEW USER T/S
0089 10064 017372R      JSB SETNX      SET NEW INXTTS AND SYSTS IF IND.
0090 10065 016134R      JSB MVSET
0091*
0092 10066 060200      LDA DISCL
0093 10067 043235R      ADA B400
0094 10070 072217R      STA PTSEC      SET ORIGIN OF USER FILE
0095 10071 072766R      STA NEWTS      SET START OF NEW USER FILES
0096 10072 063170R      LDA PMTBL
0097 10073 073232R      STA PMLOC      PMLOC = START OF TRANSFER TABLE
0098 10074 163232R      LDA PMLOC,I
0099 10075 002020      SSA      IS 1ST ENTRY A DELETED SET?
0100 10076 026104R      JMP PRG60      YES
0101 10077 066766R      LDB NEWTS
0102 10100 016222R      JSB STRAK      GO FIND START OF SKIP AREA
0103 10101 076766R      STB NEWTS      SET START OF NEW
0104 10102 076217R      STB PTSEC      AND OLD USER FILES
0105 10103 037232R      ISZ PMLOC      BUMP TRANSFER TBL POINTER
0106 10104 163232R PRG60 LDA PMLOC,I      GET # OF SECTORS PURGED
0107 10105 001665      ELA,CLE,ERA      CLEAR SIGN BIT
0108 10106 066217R      LDB PTSEC
0109 10107 016222R      JSB STRAK      GO TO END OF SKIP AREA
0110 10110 076217R      STB PTSEC      SET START OF TRANSFER AREA
0111 10111 017625R      JSB PMNXT
0112 10112 002003      SZA,RSS      END OF OLD USER FILE?
0113 10113 026120R      JMP PRG70
0114 10114 016147R      JSB MVTSF      MOVE 'A' SECTORS ON THE DISC
0115 10115 017625R      JSB PMNXT
0116 10116 002002      SZA
0117 10117 026104R      JMP PRG60      END OF TRANSFER TABLE?
0118*      NO - PROCESS PURGED GROUP
0119 10120 017725R PRG70 JSB NXTSC
0120 10121 026124R      JMP PRG75
0121 10122 006400      CLB
0122 10123 027710R      JMP PURGE+2
0123 10124 017441R PRG75 JSB RESET

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PAGE 0106 #09 PURGE THE USER FILE

0124	10125	002400	CLA	CLEAR FILE VALIDITY FLAG
0125	10126	066133R	LDB	XTRAK
0126	10127	016430R	JSB	EXSET
0127	10130	002400	CLA	
0128	10131	016765R	JSB	OPONF
0129	10132	127706R	JMP	PURGE,I
0130*				
0131	10133	000327	XTRAK	DEF TRAK#

```

0133*
0134* *****
0135*      * SETUP TO START USER FILE TRANSFERS *
0136* *****
0137*
0138 10134 000000 MVSET NOP
0139 10135 062174R LDA RBUF
0140 10136 003004 CMA,INA BUFFER LENGTH
0141 10137 040100 ADA LWAVL LWA AVL, MEM = L(INBUF)
0142 10140 006400 CLB
0143* *****
0144 10141 016436R JSB .,RRL
0145 10142 177747 DEC -25 DIVIDE BY 128
0146* *****
0147 10143 072221R STA PSEC +(SEC. COUNT)
0148 10144 003004 CMA,INA
0149 10145 072222R STA MSEC -(SEC. COUNT)
0150 10146 126134R JMP MVSET,I
0151*
0152* *****
0153*      * TRANSFER MASS SECTORS ON DISC *
0154*      * PTSEC = T/S OF ORIGIN *
0155*      * NEWTS = T/S OF NEW AREA *
0156*      * MVSET MUST BE ENTERED PRIOR TO ENTRY *
0157*      * A = # OF SECTORS TO TRANSFER *
0158* *****
0159 10147 000000 MVTSF NOP
0160 10150 072014R STA ENTLN SET COUNTER FOR SECTOR MOVE
0161 10151 062014R PRG65 LDA ENTLN GET SECTOR COUNT OF ENTRY
0162 10152 002020 SSA DONE WITH THIS ENTRY?
0163 10153 126147R JMP MVTSF,I YES
0164 10154 002003 SZA,RSS DONE WITH THIS ENTRY?
0165 10155 126147R JMP MVTSF,I YES
0166 10156 016161R JSB RDTSF
0167 10157 016177R JSB WRTSF
0168 10160 026151R JMP PRG65
0169*
0170 10161 000000 RDTSF NOP
0171 10162 042222R ADA MSEC -NO. SECTS IN MOVE BUFFER
0172 10163 066014R LDB ENTLN
0173 10164 002021 SSA,RSS MORE THAN N SECS LEFT?
0174 10165 066221R LDB PSEC YES - SET UP TO MOVE MAX. SELTS.
0175 10166 076220R STB PTOTL SAVE IT
0176 10167 072014R STA ENTLN SAVE REMAINING SECTORS, IF ANY
0177 10170 063623R LDA FLUN
0178 10171 073456R STA RWLUN SET LUN = 2 IF WORK AREA
0179 10172 062217R LDA PTSEC
0180 10173 017415R JSB RDISC READ N SECTORS OR LESS
0181 10174 011375R RBUF DEF INBUF
0182 10175 072217R STA PTSEC
0183 10176 126161R JMP RDTSF,I
0184*
0185 10177 000000 WRTSF NOP
0186 10200 066220R LDB PTOTL GET SECTOR MOVE COUNTER
0187 10201 062766R LDA NEWTS GET NEW TRK/SECT ORIGIN
0188 10202 017425R JSB WDISC GO WRITE 6 SECTORS OR LESS

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0189 10203 011375R      DEF INBUF
0190 10204 072766R      STA NEWTS
0191 10205 126177R      JMP WRTSF,I
0192*
0193 10206 000200      B200  OCT 200
0194 10207 010210R     BONLC DEF BONBF
0195 10210 000000      BONBF BSS 7
0196 10217 000000      PTSEC NOP
0197 10220 000000      PTOTL NOP
0198 10221 000000      PSEC  NOP
0199 10222 000000      MSEC  NOP

```

SAVE NEW TRK/SECT ORIGIN

USED BY EDIT ROUTINE

USER TRK/SECTOR
 # OF SECTORS PURGED
 +(NO. SECTORS IN TRANSFER BUFFER)
 -(DITTO)

```

0201* *****
0202* * EDIT - EDIT A USER SOURCE STATEMENT FILE. *
0203* * - A NEW FILENAME MAY BE DECLARED FOR *
0204* * THE EDITED FILE, IN WHICH CASE THE *
0205* * ORIGINAL FILE IS NOT PURGED. *
0206* * FORMAT 'EDIT,FILENAME,LUN(,NEW FILENAME)' *
0207* * EDIT FILE FORMAT FROM LUN: *
0208* * /D(DELETE),M(,N) *
0209* * /I(INSERT),M FOLLOWED BY SOURCE STMS.*
0210* * /R(REPLACE),M(,N) FOLLOWED BY SOURCE STMS.*
0211* * /E(ND) INDICATES END OF EDITING.*
0212* * /M(MERGE)(,K),FILE2(,M(,N)) *
0213* * /S(SUPPRESS) *
0214* * /U(NSUPPRESS) *
0215* *
0216* * ERRORS: *
0217* * 1.FILENAME MISSING, UNDEFINED OR NON-SOURCE *
0218* * 2.NEW FILENAME ALREADY IN FILE. *
0219* * 3.END OF FILENAME FILE REACHED BEFORE '/E'. *
0220* * 4.(CURR.SEQ.NO.)>M>N *
0221* * 5.AN 'N' ON A /I STATE. NOT =M *
0222* * 6.M OR N BEYOND RANGE OF FILENAME FILE *
0223* * 7.ILLEGAL EDIT REQUEST *
0224* *
0225* * 'JOB' IS ABORTED ON ERRORS 3 AND 6 *
0226* * ON ALL OTHER ERRORS THE EDIT FLAG 'EDITF' *
0227* * IS SET NON-ZERO WHILE THE NEW STATEMENT *
0228* * IS BEING READ THRU 'RNS' *
0229* *****
0230 10223 006400 EDIT CLB
0231 10224 076752R STB ABINF CLEAR ABS BIN FLAG
0232 10225 006004 INB SET COLON FLAG TO ACCEPT
0233 10226 076520R STB COLF :: INPUT
0234 10227 017651R JSB USERD SEARCH FOR OLD FILENAME
0235 10230 026126R JMP PMISS NONE THERE - ERROR EXIT
0236 10231 002103 CLE, SZA, RSS
0237 10232 026275R JMP RUN2 FILENAME UNDEFINED
0238 10233 066207R LDB BONLC (A=ENTRY LOCN)
0239 10234 017047R JSB WMOVE MOVE ENTRY TO RONBF
0240 10235 000005 DEC 5
0241 10236 002400 CLA
0242 10237 073265R STA SUPFL CLEAR SUPPRESS FLAG.
0243 10240 163232R LDA PMLOC, I
0244 10241 072215R STA BONBF+5 SAVE CHAR.COUNT
0245 10242 062212R LDA BONBF+2
0246 10243 010073 AND B177 GET ENTRY TYPE
0247 10244 050064 CPA .+11B IS IT A SOURCE STATEMENT FILE?
0248 10245 002001 RSS YES
0249 10246 026741R JMP PILLG NO - ILLEGAL FILE.
0250 10247 016515R JSB ASCDC GO GET L.U.N. PARAMETER
0251 10250 026126R JMP PMISS ERROR, IT ISN'T THERE
0252 10251 017626R JSB DSCLU
0253 10252 072771R STA INLUN
0254 10253 073647R STA SAVEA
0255 10254 006404 CLB, INB B>0 - INPUT DEVICE
0256 10255 017506R JSB LUCK IS DEVICE OK?

```

0257	10256	017634R	JSB	NULCK	
0258	10257	026311R	JMP	RNS	
0259	10260	037232R	ISZ	PMLOC	YES
0260	10261	062771R	LDA	INLUN	LUN TO A
0261	10262	016751R	JSB	EOTST	GO SET EOT STATUS IN CASE NEEDED
0262	10263	017651R	JSB	USERD	'NEW' FILENAME PRESENT?
0263	10264	026302R	JMP	EDIT1	
0264	10265	002002	SZA		IS IT DUPLICATE?
0265	10266	026073R	JMP	NMDUP	YES = ERROR, DUPLICATE FILENAME
0266	10267	163232R	LDA	PMLOC,I	
0267	10270	072215R	STA	BONBF+5	SAVE CHAR.COUNT
0268	10271	063570R	LDA	NMBUF	MOVE NEW FILENAME TO RONBF
0269	10272	072210R	STA	BONBF	
0270	10273	063571R	LDA	NMBUF+1	
0271	10274	072211R	STA	BONBF+1	
0272	10275	063572R	LDA	NMBUF+2	
0273	10276	072212R	STA	BONBF+2	
0274	10277	060161	LDA	CUDSC	SAVE SUBCHANNEL OF
0275	10300	073270R	STA	SVCUD	PRIMARY FILE
0276	10301	026307R	JMP	EDIT2	
0277	10302	060161	EDIT1	LDA	CUDSC
0278	10303	073270R	STA	SVCUD	SAVE SUBCHNL OF PRIMARY FILE
0279	10304	050155	CPA	SYSSC	USER ON SYSTEM DISC?
0280	10305	002001	RSS		-YES, DON'T SET DOSM FLAG
0281	10306	037312R	ISZ	DOSM	-NO, SET DOSM NON-ZERO
0282	10307	062214R	EDIT2	LDA	BONBF+4
0283	10310	003000	CMA		
0284	10311	072014R	STA	ENTLN	ENTLN = -(FILE LENGTH + 1)
0285	10312	062213R	LDA	BONBF+3	
0286	10313	073566R	STA	CURTS	CURTS = TRK/SECT ORG OF FILENAME
0287	10314	060157	LDA	NXTTS	
0288	10315	072213R	STA	BONBF+3	SET ORIGIN OF EDITED FILE
0289	10316	067312R	LDB	DOSM	
0290	10317	006002	SZB		USER WORK AREA?
0291	10320	060160	LDA	SYSTS	YES: USE WORK AREA
0292	10321	073311R	STA	SAVTS	SET TRK/SEC PNTR FOR NEW FILE.
0293	10322	002400	CLA		
0294	10323	073313R	STA	NOFLG	
0295	10324	072760R	STA	CDCNT	SET STATEMENT COUNT = 0
0296	10325	072214R	STA	BONBF+4	CLEAR SECTOR COUNT OF EDITED FL.
0297	10326	063500R	LDA	LUN3	
0298	10327	006002	SZB		WRITE WORK AREA?
0299	10330	063477R	LDA	LUN2	YES: SET LUN = 2
0300	10331	073623R	STA	FLUN	
0301	10332	062763R	LDA	DNBUF	
0302	10333	073565R	STA	MLOCN	MLOCN=L(INBUF+128) INITIALLY
0303	10334	063315R	LDA	MEDTB	
0304	10335	073305R	STA	ELOCN	ELOCN=L(DICBF-1) INITIALLY
0305	10336	002400	CLA		INIT. END OF FILE FLAG
0306	10337	073266R	STA	EOFFL	
0307	10340	073267R	STA	DICBL	START WITH GOOD DICBF
0308	10341	002004	INA		SET INFL TO INDICATE IED
0309	10342	073243R	STA	INFL	
0310*					
0311	10343	060057	LDA	.,+4	
0312	10344	067620R	LDB	DICAD	

```

0313 10345 017430R JSB CODIN READ CODE SEG. INTO DICBF
0314*
0315 10346 DICBF EQU *
0316*
0317*
0318*
0319* *****
0320* * EDITR - THIS IS THE MAIN EDITING PROCESSOR LOOP *
0321* *****
0321 10346 064123 EDITR LDB JBUFF SET BUFFER=JBUFF
0322 10347 016627R JSB EDINP GO INPUT A REQUEST
0323 10350 017064R EDIT3 JSB SCANR GO SCAN THE EDIT STATEMENT
0324 10351 063265R LDA SUPFL
0325 10352 002002 SZA
0326 10353 026362R JMP EDTS PRINTING SUPPRESSED
0327 10354 066216R LDB STLEN
0328 10355 062771R LDA INLUN
0329 10356 050054 CPA .+1 WAS REQUEST FROM TTY?
0330 10357 026362R JMP ++3 YES
0331 10360 060123 LDA JBUFF NO, PRINT IT ON THE TTY NOW
0332 10361 016744R JSB ERROG
0333 10362 016616R EDTS JSB SUM? /S, /U OR /M?
0334 10363 057320R CPB END TRAP OUT /E AFTER /M AT
0335 10364 002001 RSS END OF FILE=1
0336 10365 026371R JMP EDTS1
0337 10366 063266R LDA EOFL IF EOFL=1 THEN IT'S END OF
0338 10367 002002 SZA FILE ALREADY. DON'T READ ANY M
0339 10370 026653R JMP EDITX
0340 10371 017335R EDTS1 JSB DISCR READ A STAT. FROM FILE, BMP CNTR
0341 10372 002400 CLA END OF FILE EXIT, SET A=0
0342 10373 072505R STA EDLEN SAVE STATEMENT LENGTH
0343 10374 036760R ISZ CDCNT
0344 10375 164123 RNRET LDB JBUFF,I
0345 10376 057320R CPB END WAS '/E' READ FROM EDIT FILE?
0346 10377 026653R JMP EDITX YES=GO COMPLETE THE EDIT PROCESS
0347 10400 002003 SZA,RSS NO = WAS THERE AN EOF FROM DISC?
0348 10401 026643R JMP EOFR YES = ERROR
0349 10402 160123 LDA JBUFF,I
0350 10403 072770R EDILG STA EDITF SET EDIT FLAG NON=ZERO
0351 10404 010075 AND 81774
0352 10405 053323R CPA SLUP WAS A SLASH THERE?
0353 10406 002001 RSS -YES
0354 10407 026741R JMP PILLG GO TO DIAGN. AND RE-READ
0355*
0356* * EVALUATE 'M' AND 'N' HERE *
0357*
0358 10410 016515R JSB ASCDC GO GET 1ST LIMIT
0359 10411 027676R JMP SLSTE NO VALUE, ERROR
0360 10412 073306R STA MVALU SAVE M
0361 10413 037232R ISZ PMLOC
0362 10414 016515R JSB ASCDC
0363 10415 063306R LDA MVALU NO N = SET=M
0364 10416 073307R STA NVALU SAVE N VALUE
0365 10417 067306R LDB MVALU
0366 10420 007004 CMB,INB
0367 10421 040001 ADA B
0368 10422 073600R STA TEMP TEMP = M-N

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0369	10423	002020	SSA	IS M GREATER THAN N?
0370	10424	027676R	JMP SLSTE	YES, SEQUENCE ERROR
0371	10425	046760R	ADB CDCNT	
0372	10426	044052	ADB, -1	B=1 TO B
0373	10427	006021	SSB, RSS	IS M GREATER THAN STATE, NO.?
0374	10430	027676R	JMP SLSTE	YES, ERROR
0375	10431	160123	LDA JBUFF, I	NO, IT'S OK
0376	10432	053321R	CPA INS	WAS AN INSERT REQ?
0377	10433	002001	RSS	YES
0378	10434	026441R	JMP EDIT4	NO = GO TEST FOR /D OR /R
0379	10435	067600R	LDB TEMP	
0380	10436	006003	SZB, RSS	M=N (I.E. M ONLY)?
0381	10437	026444R	JMP EDIT5	YES = SKIP TO CONTINUE
0382	10440	027676R	JMP SLSTE	GO PRINT LIMIT ERROR
0383	10441	053317R	EDIT4 CPA DEL	/D?
0384	10442	026444R	JMP EDIT5	OK
0385	10443	053322R	CPA REP	/R?
0386	10444	002401	EDIT5 CLA, RSS	OK
0387	10445	026741R	JMP PILLG	ILLEGAL PARAMETER
0388	10446	072770R	STA EDITF	CLEAR THE EDIT FLAG
0389	10447	073310R	STA BTRAK	CLEAR THE SOURCE COUNTER
0390	10450	062760R	LDA CDCNT	
0391	10451	053306R	CPA MVALU	
0392	10452	026461R	JMP EDIT6	CDCNT=M (START OF NEW EDIT STS.)
0393	10453	017326R	JSB EDITW	WRITE CURR. BUFFER TO NEW FILE
0394	10454	017336R	JSB DISCR	READ NEXT STATE, FROM FILE
0395	10455	026643R	JMP EOFR	END OF FILE FROM DISC.
0396	10456	072505R	STA EDLEN	SAVE STATEMENT LENGTH
0397	10457	036760R	ISZ CDCNT	
0398	10460	026444R	JMP EDIT5	
0399*				
0400	10461	160123	EDIT6 LDA JBUFF, I	
0401	10462	053321R	CPA INS	IS THIS AN INSERT?
0402	10463	026515R	JMP EDIT9	YES
0403	10464	063307R	LDA NVALU	NO
0404	10465	052760R	CPA CDCNT	END OF STATES, TO BE DELETED?
0405	10466	026474R	JMP EDIT7	YES
0406	10467	017335R	JSB DISCR	NO
0407	10470	026643R	JMP EOFR	END OF FILE RETURN
0408	10471	072505R	STA EDLEN	SAVE STATEMENT LENGTH
0409	10472	036760R	ISZ CDCNT	
0410	10473	026464R	JMP EDIT6+3	= GO BACK
0411	10474	160123	EDIT7 LDA JBUFF, I	
0412	10475	053317R	CPA DEL	WAS THIS A DELETE?
0413	10476	026346R	JMP EDITR	YES = GO FOR NXT CONTROL(EDIT)
0414	10477	067351R	EDIT8 LDB BFFAD	
0415	10500	016627R	JSB EDINP	GO INPUT A STATEMENT
0416	10501	076505R	STB EDLEN	SAVE STATEMENT LENGTH
0417	10502	063351R	LDA BFFAD	
0418	10503	064123	LDB JBUFF	
0419	10504	017047R	NORTN JSB WMOVE	
0420	10505	000000	EDLEN NOP	
0421	10506	062763R	LDA BUFFER	
0422	10507	010075	AND B1774	
0423	10510	053323R	CPA SLUP	IS 1ST CHAR = /?
0424	10511	026517R	JMP EDIT0	YES = GO SET BUFFER

```

0425 10512 053324R      CPA B35K      1ST CHAR = COLON?
0426 10513 026527R      JMP EDT10
0427 10514 037310R      ISZ BTRAK      BUMP THE SOURCE COUNTER
0428 10515 017326R EDIT9 JSB EDITW      NO
0429 10516 026477R      JMP EDIT8
0430*
0431 10517 067310R EDIT0 LDB BTRAK
0432 10520 006002      SZB      WAS ANY SOURCE READ?
0433 10521 026350R      JMP EDIT3      -YES, GO PROCESS
0434 10522 063277R      LDA NOSOR
0435 10523 064060      LDB ,+5
0436 10524 077313R      STB NOFLG      SET SOURCE FLAG NON=ZERO
0437 10525 076770R      STB EDITF      SET EDIT FLAG NON=ZERO
0438 10526 026130R      JMP PMISS+2
0439*
0440*      * PROCESS INPUT WITH COLON IN COLUMN 1 *
0441*
0442 10527 062771R EDT10 LDA INLUN      IF EDIT FILE FROM TTY, CAN'T
0443 10530 050112      CPA SYSTY      HAVE :AB OR :OF
0444 10531 026535R      JMP **4
0445 10532 050111      CPA BATCH      IF EDIT FILE FROM BATCH DEV.,
0446 10533 026517R      JMP EDIT0      CAN'T HAVE COLON IN COL 1
0447 10534 026514R      JMP EDIT9-1    OK IF FROM ANY OTHER DEVICE
0448 10535 062763R      LDA BUFR      GET 1ST WORD
0449 10536 010074      AND B377      GET 1ST CHAR AFTER COLON
0450 10537 001727      ALF,ALF      LEFT JUSTIFY IT
0451 10540 070001      STA B      SAVE IT TEMPORARILY
0452 10541 062764R      LDA BUFR+1    GET 2ND WORD
0453 10542 010075      AND B1774      GET 2ND CHAR AFTER COLON
0454 10543 001727      ALF,ALF      RIGHT JUSTIFY IT
0455 10544 030001      IOR B      MAKE INTO 1 WORD
0456 10545 053203R      CPA AOF      :OF?
0457 10546 026614R      JMP OFF
0458 10547 053143R      CPA CHARS+2    :AB?
0459 10550 026450R      JMP EJ0BX+1
0460 10551 026514R      JMP EDIT9-1    NONE OF THESE, OK.
0461*
0462*      * RETURN FROM RNS(RE-REQUEST) HERE *
0463*
0464 10552 063267R EDITA LDA DICBL      IS DICBF CLOBBERED BY /MERGE?
0465 10553 002003      SZA,RSS
0466 10554 026571R      JMP EDITC      NO.
0467 10555 006404      CLB,INB      RESTORE SUBCHNL OF PRIMARY
0468 10556 063270R      LDA SVCUD      EDIT FILE IF IT HAS BEEN
0469 10557 050161      CPA CUDSC      CHANGED DUE TO MERGE
0470 10560 002001      RSS
0471 10561 016162R      JSB JEXUD
0472 10562 060057      LDA ,+4      YES, RESTORE CODE SEG. IN DICBF
0473 10563 067620R      LDB DICAD
0474 10564 017430R      JSB CODIN
0475 10565 002400      CLA      CLEAR FLAG TO SAY DICBF IS GOOD
0476 10566 073267R      STA DICBL
0477 10567 063261R      LDA TEMP4      RESTORE SAVED EDLEN
0478 10570 072505R      STA EDLEN
0479*
0480 10571 017064R EDITC JSB SCANR      SET UP PARAMETER LIST

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0481 10572 076770R      STB EDITF      CLEAR EDIT FLAG
0482 10573 160123      LDA JBUFF,I
0483 10574 010075      AND B1774
0484 10575 053324R      CPA B35K
0485 10576 067172R      LDB PMCNT+1
0486 10577 057143R      CPB CHARS+2      :AB INPUT?
0487 10600 026450R      JMP EJOBX+1      -YES, GO ABORT JOB
0488 10601 057203R      CPB AOF          :OF INPUT?
0489 10602 026614R      JMP OFF
0490 10603 006400      CLB
0491 10604 057313R      CPB NOFLG      LOOKING FOR SOURCE?
0492 10605 026614R      JMP EDITB      -NO
0493*
0494 10606 077313R      STB NOFLG
0495 10607 062216R      LDA STLEN
0496 10610 072505R      STA EDLEN
0497 10611 060123      LDA JBUFF
0498 10612 067351R      LDB OFFAD
0499 10613 026504R      JMP NORTN
0500*
0501 10614 016616R EDITB JSB SUM?      /S,/U OR /M?
0502 10615 026375R      JMP RNRET      NO.
0503*
0504 10616 000000      SUM? NOP
0505 10617 164123      LDB JBUFF,I
0506 10620 057273R      CPB SUP          /S?
0507 10621 026757R      JMP EDITS
0508 10622 057274R      CPB UNSUP        /U?
0509 10623 026762R      JMP EDITU
0510 10624 057272R      CPB MER          /M?
0511 10625 026765R      JMP EDITM
0512 10626 126616R      JMP SUM?,I      RETURN IF NONE OF ABOVE.
0513*
0514*
0515*      * ENTER AN EDIT REQUEST OR EDIT STATEMENT *
0516*
0517 10627 000000      EDINP NOP
0518 10630 077600R      STB TEMP SAVE INPUT BUFFER LOCATION
0519 10631 063036R      LDA PRINP      A = 'A' FOLLOWED BY BELL'
0520 10632 066771R      LDB INLUN
0521 10633 007000      CMB
0522 10634 054051      CPB ,+2      IS INPUT FROM TTY?
0523 10635 016744R      JSB ERRDG      GO PRINT 'A' FOLLOWED BY BELL'
0524 10636 067600R      LDB TEMP      RESTORE BUFFER LOCATION
0525 10637 063325R      LDA D40      40
0526 10640 017145R      JSB STORD      READ 80 OR LESS CHARS FROM LUN
0527 10641 026643R      JMP EOFR      END OF FILE EXIT(ILLEGAL)
0528 10642 126627R      JMP EDINP,I      RETURN
0529*
0530 10643 064057      EOFR LDB ,+4
0531 10644 062646R      LDA ++2
0532 10645 026130R      JMP PMISS+2
0533 10646 010647R      DEF ++1
0534 10647 042516      ASC 4,END FILE
0535*
0536*      * SET UP FOR EXIT FROM EDIT *

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0537*
0538 10653 017326R EDITX JSB EDITW WRITE A STAT.
0539 10654 017335R JSB DISCR READ A STATE.
0540 10655 002400 CLA END OF FILE EXIT, SET A=0
0541 10656 072505R STA EDLEN SAVE STATEMENT LENGTH
0542 10657 026653R JMP EDITX NO, GO TRANSFER ANOTHER STATE.
0543 10660 072216R EDTX1 STA BONBF+6 CLEAR PURGE FLAG
0544 10661 003400 CCA
0545 10662 072505R STA EDLEN SET EOF WORD = -1
0546 10663 017326R JSB EDITW
0547 10664 063311R LDA SAVTS WRITE LAST SECTOR OF EDITED FILE
0548 10665 067623R LDB FLUN
0549 10666 077456R STB RWLUN SET CORRECT LUN
0550 10667 006404 CLB, INB
0551 10670 017425R JSB WDISC
0552 10671 007164R DEF EDTBF
0553 10672 066207R EDTX2 LDB BONLC
0554 10673 005200 RBL ADDR. OF FILENAME
0555 10674 063500R LDA LUN3
0556 10675 073623R STA FLUN SET LUN3 FOR DISC
0557 10676 062215R LDA BONBF+5 # OF CHARS
0558 10677 017501R JSB DIRSR SEARCH DIRECTORY
0559 10700 000773R DEF USDIR
0560 10701 002002 SZA NO NAME
0561 10702 026752R JMP EDTX3 OUT IF ENTRY IS FOUND
0562 10703 063312R LDA DOSM
0563 10704 002002 SZA WORK AREA USED?
0564 10705 026720R JMP EDTXY YES: DON'T PUT IN NEW ENTRY YET
0565 10706 060064 LDA .+11B SET ENTRY TYPE FOR DICT. ENTRY
0566 10707 072764R STA ENTYP
0567 10710 062214R LDA BONBF+4 ENTRY LENGTH
0568 10711 002004 INA ADD 1 FOR FINAL SECTOR
0569 10712 072014R STA ENTLN
0570 10713 066213R LDB BONBF+3 ENTRY ORG.
0571 10714 076765R STB ENTSC
0572 10715 016222R JSB STRAK
0573 10716 076766R STB NEWTS
0574 10717 016774R JSB DCSTR GO STORE ENTRY IN DICTIONARY
0575 10720 066216R EDTXY LDB BONBF+6
0576 10721 006003 SZB, RSS
0577 10722 026727R JMP EDNEW
0578 10723 017714R JSB NXSET
0579 10724 002400 CLA
0580 10725 006400 CLB
0581 10726 017706R JSB PURGE NO - GO PURGE OLD ENTRY
0582 10727 063312R EDNEW LDA DOSM
0583 10730 002003 SZA, RSS WORK AREA USED?
0584 10731 026311R JMP RNS NO: TAKE EXIT
0585 10732 060157 LDA NXTTS YES: SETUP FOR SHIFT
0586 10733 072766R STA NEWTS
0587 10734 072213R STA BONBF+3
0588 10735 016134R JSB MVSET SET FILE TRANSFER COUNT
0589 10736 037312R ISZ DOSM SET DOSM = 2
0590 10737 060160 LDA SYSTS
0591 10740 072217R STA PTSEC SET W.A. ORIGIN
0592 10741 063477R LDA LUN2

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0593 10742 073623R STA FLUN
0594 10743 062214R LDA BONBF+4
0595 10744 002004 INA SET ENTRY LENGTH
0596 10745 016147R JSB MVTSE MOVE 'A' SECTORS FROM WORK AREA
0597 10746 002400 CLA
0598 10747 073312R STA DOSM CLEAR WORK AREA FLAG
0599 10750 072216R STA BONBF+6 CLEAR PURGE FLAG
0600 10751 026672R JMP EDTX2
0601*
0602 10752 072216R EDTX3 STA BONBF+6
0603 10753 060075 LDA B1774
0604 10754 173565R STA MLOCN,I DELETE OLD FILENAME
0001 10755 016034R JSB WSECT WRITE LAST SECTOR BACK
0002 10756 026672R JMP EDTX2
0003*
0004* * SUPPRESS PRINTING EDIT COMMANDS ON TTY *
0005*
0006 10757 060054 EDIT3 LDA .+1 SET SUPPRESS FLAG,
0007 10760 073265R STA SUPFL
0008 10761 026346R JMP EDITR
0009*
0010* * UNSUPPRESS PRINTING EDIT COMMANDS ON TTY*
0011*
0012 10762 002400 EDITU CLA
0013 10763 073265R STA SUPFL CLEAR " "
0014 10764 026346R JMP EDITR
0015*
0016*
0017*
0018* *****
0019* * PROCESS /MERGE COMMAND *
0020*
0021 10765 063232R EDITM LDA PMLOC
0022 10766 072770R STA EDITF SET EDIT FLAG NON-ZERO
0023 10767 002004 INA CHECK NEXT PARAMETER
0024 10770 164000 LDB A,I
0025 10771 006003 SZB,RSS IS NEXT PARM THERE
0026 10772 026126R JMP PMISS
0027 10773 002004 INA INCREMENT PMTBL POINTER
0028 10774 164000 LDB A,I TYPE/CHAR COUNT TO B
0029 10775 006021 SZB,RSS IS TYPE NUMERIC?
0030 10776 027003R JMP EDTM1 NO. SET DEFAULT VALUE
0031 10777 016515R JSB ASCDC YES - GO GET IT
0032 11000 026126R JMP PMISS
0033 11001 037232R ISZ PMLOC
0034 11002 027004R JMP **2
0035 11003 003400 EDTM1 CCA DEFAULT=-1,EDN OF FILE
0036 11004 073306R STA MVALU
0037 11005 063623R LDA FLUN SAVE LU OF OUTPUT FILE
0038 11006 073271R STA SVFLN (DESTROYED BY 'USERD' ROUTINE)
0039 11007 063565R LDA MLOCN SAVE MLOCN BEFORE USERD DESTROYS
0040 11010 073256R STA TEMP1
0041 11011 073267R STA DICBL SET FLAG 0 : 'DICBF CLOBBERS'
0042 11012 063566R LDA CURTS SAVE CURTS
0043 11013 073267R STA TEMP2
0044 11014 062505R LDA EDLEN SAVE EDLEN BEFORE DICBF CLOBBERS I

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0045	11015	073261R	STA TEMP4	
0046	11016	017651R	JSB USERD	GO SEARCH FOR FILENAME TO MERGE
0047	11017	026126R	JMP PMISS	NONE THERE - ERROR EXIT
0048	11020	002103	CLE, SZA, RSS	
0049	11021	026275R	JMP RUN2	FILENAME UNDEFINED.
0050	11022	064000	LDB A	CHECK FOR SOURCE FILE
0051	11023	044055	ADB, +2	B = ADDR OF 3RD WORD IN ENTRY
0052	11024	160001	LDA B, I	
0053	11025	010073	AND B177	EXTRACT TYPE
0054	11026	050064	CPA, +11B	SOURCE TYPE?
0055	11027	006005	INB, RSS	YES
0056	11030	026741R	JMP PILLG	NO - ERROR
0057	11031	160001	LDA B, I	
0058	11032	073264R	STA CT92	SAVE STARTING T/S
0059	11033	006004	INB	
0060	11034	160001	LDA B, I	GET FILE LENGTH
0061	11035	003000	CMA	A = -(FILE LENGTH + 1)
0062	11036	073263R	STA FLN2	SAVE FILE LGTH
0063	11037	060161	LDA CUDSC	
0064	11040	064073	LDB XJF8C	
0065	11041	016430R	JSB EXSET	SET SC
0066*				
0067	11042	063271R	LDA SVFLN	RESTORE LU OF
0068	11043	073623R	STA FLUN	OUTPUT FILE
0069	11044	006404	CLB, INB	RESTORE SUBCHNL OF PRIMARY
0070	11045	063270R	LDA SVCUD	EDIT FILE IF IT HAS BEEN
0071	11046	050161	CPA CUDSC	CHANGED BY A MERGE COMMAND
0072	11047	002001	RSS	
0073	11050	016162R	JSB JEXUD	
0074	11051	063256R	LDA TEMP1	RESTORE MLOCN
0075	11052	073565R	STA MLOCN	
0076	11053	063257R	LDA TEMP2	RESTORE CURTS
0077	11054	073566R	STA CURTS	
0078*				
0079	11055	060057	LDA, +4	READ IN CODE SEG.
0080	11056	067620R	LDB DICAD	
0081	11057	017430R	JSB CODIN	
0082	11060	002400	CLA	CLEAR FLAG TO SAY DICBF IS GOOD
0083	11061	073267R	STA DICBL	
0084	11062	063261R	LDA TEMP4	RESTORE EDLEN
0085	11063	072505R	STA EDLEN	
0086*				
0087*		CHECK LIMITS	*	
0088*				
0089	11064	016515R	JSB ASCDC	GET 1ST LIMIT
0090	11065	027204R	JMP EDTM8	NO VALUE - DEFAULT ENTIRE FILE
0091	11066	073275R	STA MVAL2	SAVE M2
0092	11067	037232R	ISZ PMLOC	
0093	11070	016515R	JSB ASCDC	
0094	11071	063275R	LDA MVAL2	NO N2 = SET = M2
0095	11072	073276R	STA NVAL2	
0096	11073	002003	SZA, RSS	NVAL2=0?
0097	11074	027102R	JMP EDTM9	YES, NO NEED TO TEST LIMITS.
0098	11075	067275R	LDB MVAL2	
0099	11076	007004	CMB, INB	
0100	11077	040001	ADA B	

0101	11100	002020	SSA	MVAL2 > NVAL2?
0102	11101	027676R	JMP SLSTE	YES
0103	11102	002400	EDTM9 CLA	
0104	11103	072770R	STA EDITF	CLEAR EDIT FLAG
0105	11104	073310R	STA BTRAK	
0106	11105	063306R	LDA MVALU	
0107	11106	002020	SSA	MVALU < 0?
0108	11107	027117R	JMP EDTM2	YES, MERGE AT END
0109	11110	066760R	LDB CDCNT	
0110	11111	007004	CMB, INB	MVALU = CDCNT?
0111	11112	040001	ADA B	
0112	11113	002003	SZA, RSS	
0113	11114	027133R	JMP EDTM3	YES = START MERGE.
0114	11115	002020	SSA	MVALU < CDCNT?
0115	11116	027676R	JMP SLSTE	YES = ERROR
0116*				
0117	11117	063266R	EDTM2 LDA EOFL	HAS EOF ON PRIMARY FILE
0118	11120	002002	SZA	BEEN ENCOUNTERED?
0119	11121	027211R	JMP TSEOF	YES - SKIP READ
0120	11122	017335R	JSB DISCR	READ NEXT STMT FROM PRIMARY FILE
0121	11123	027211R	JMP TSEOF	EOF = SEE IF MERGE AT END
0122	11124	072505R	STA EDLEN	
0123	11125	017326R	JSB EDITW	WRITE STATEMENT
0124	11126	036760R	ISZ CDCNT	
0125	11127	063306R	LDA MVALU	
0126	11130	052760R	CPA CDCNT	MVALU = CDCNT?
0127	11131	002001	RSS	YES
0128	11132	027117R	JMP EDTM2	NO = CONTINUE READING
0129*				
0130	11133	062505R	EDTM3 LDA EDLEN	SAVE EDLEN, ETC BEFORE
0131	11134	073261R	STA TEMP4	READING FILE 2
0132	11135	063565R	LDA MLOCN	
0133	11136	073256R	STA TEMP1	
0134	11137	063566R	LDA CURTS	
0135	11140	073257R	STA TEMP2	
0136	11141	062014R	LDA ENTLN	
0137	11142	073260R	STA TEMP3	
0138	11143	002400	CLA	
0139	11144	073262R	STA CDCN2	INIT. STAT. COUNTER
0140	11145	062763R	LDA DNBUF	INITIALIZE MLOCN, CURTS, EN
0141	11146	073565R	STA MLOCN	READING FILE 2
0142	11147	063264R	LDA CTS2	
0143	11150	073566R	STA CURTS	
0144	11151	063263R	LDA FLN2	
0145	11152	072014R	STA ENTLN	
0146	11153	063507R	EDTM4 LDA N3	SET LUN TO -3 FOR READING
0147	11154	073456R	STA RWLUN	THE CORRECT SUBCHANNEL
0148	11155	017335R	JSB DISCR	READ A STATEMENT FROM FIL
0149	11156	026643R	JMP EOFR	
0150	11157	072505R	STA EDLEN	
0151	11160	037262R	ISZ CDCN2	
0152	11161	063262R	LDA CDCN2	
0153	11162	053275R	CPA MVAL2	START MERGING?
0154	11163	002001	RSS	YES = START MERGING
0155	11164	027153R	JMP EDTM4	
0156	11165	017326R	EDTM5 JSB EDITW	WRITE STAT. TO NEW FILE

0157	11166	063262R	LDA CDCN2	
0158	11167	053276R	CPA NVAL2	MERGING DONE?
0159	11170	027220R	JMP RESTR	YES, RESTORE PARAMS BEFORE
0160	11171	063507R	LDA N3	SET LUN TO -3
0161	11172	073456R	STA RWLUN	
0162	11173	017335R	JSB DISCR	READ A STAT FROM FILE 2
0163	11174	027200R	JMP EDTM7	CHECK IF MERGE ENTIRE FILE
0164	11175	037262R	ISZ CDCN2	BUMP STAT CNTR
0165	11176	072505R	STA EDLEN	
0166	11177	027165R	JMP EDTM5	CONTINUE TO MERGE
0167	11200	063276R	EDTM7 LDA NVAL2	
0168	11201	002002	SZA	WANT ENTIRE FILE?(NVAL2=0?)
0169	11202	026643R	JMP EOFER	NO - ERROR END OF FILE
0170	11203	027220R	JMP RESTR	YES, DONE.
0171	11204	002400	EDTM8 CLA	
0172	11205	073276R	STA NVAL2	
0173	11206	002004	INA	
0174	11207	073275R	STA MVAL2	
0175	11210	027102R	JMP EDTM9	
0176	11211	063306R	TSEOF LDA MVALU	MERGE AT END?
0177	11212	002021	SSA,RSS	I.E. MVALU < 0?
0178	11213	026643R	JMP EOFER	NO - ERROR
0179	11214	002404	CLA,INA	SET EOFFL
0180	11215	073266R	STA EOFFL	
0181	11216	002400	CLA	
0182	11217	027134R	JMP EDTM3+1	
0183*				
0184	11220	063256R	RESTR LDA TEMP1	RESTORE SAVED MLOCN,ENTLN
0185	11221	073565R	STA MLOCN	
0186	11222	063260R	LDA TEMP3	
0187	11223	072014R	STA ENTLN	
0188	11224	063261R	LDA TEMP4	
0189	11225	072505R	STA EDLEN	RESTORE EDLEN,CURTS
0190	11226	063267R	LDA TEMP2	
0191	11227	073566R	STA CURTS	
0192*				
0193*	RESTORE INBUF IF NECESSARY.			
0194*				
0195	11230	066760R	LDB CDCNT	ANY STATEMENT READ FROM FI
0196	11231	006003	SZB,RSS	I.E. EDCNT = 0?
0197	11232	026346R	JMP EDITR	
0198	11233	010074	AND B377	YES, GET T/S TO BE READ FR
0199	11234	040052	ADA,=1	A * SEC # THAT WAS IN INBU
0200	11235	002021	SSA,RSS	ON TRACK BOUNDARY?
0201	11236	027252R	JMP RST2	NO
0202	11237	063566R	LDA CURTS	YES, SHOULD BACK UP 1 TRAC
0203	11240	010075	AND B1774	
0204	11241	001727	ALF,ALF	GET TR. # RIGHT JUSTIFIED
0205	11242	040052	ADA,=1	
0206	11243	001727	ALF,ALF	LEFT JUSTIFY IT AGAIN
0207	11244	064116	LDB SECTR	B * # SEC/TRACK
0208	11245	044052	ADB,=1	LAST SEC # ON A TRACK IS 1
0209	11246	030001	RST1 IOR B	MAKE TR/SEC INTO 1 WORD
0210	11247	073566R	STA CURTS	SET CURTS FOR READING BACK
0211	11250	017477R	JSB RSECT	RESTORE INBUF
0212	11251	026346R	JMP EDITR	

0213	11252	070001	RST2	STA B		SAVE NEW SEC #
0214	11253	063566R		LDA CURTS		GET OLD TR #
0215	11254	010075		AND 81774		
0216	11255	027246R		JMP RST1		
0217	11256	000000	TEMP1	NOP		
0218	11257	000000	TEMP2	NOP		
0219	11260	000000	TEMP3	NOP		
0220	11261	000000	TEMP4	NOP		
0221	11262	000000	CDCN2	NOP		
0222	11262		TEMP5	EQU CDCN2	USED BY :EA ,:EB DIRECTIVE.	
0223	11263	000000	FLN2	NOP		
0224	11264	000000	CT82	NOP		
0225	11265	000000	SUPFL	NOP		
0226	11266	000000	EOFFL	NOP		
0227	11267	000000	DICBL	NOP		
0228	11270	000000	SVCUD	NOP		
0229	11271	000000	SVFLN	NOP		
0230	11272	027515	MER	ASC 1,/M		
0231	11273	027523	SUP	ASC 1,/S		
0232	11274	027525	UNSUP	ASC 1,/U		
0233	11275	000000	MVAL2	NOP		
0234	11276	000000	NVAL2	NOP		
0235	11277	011300R	NOSOR	DEF ++1		
0236	11300	047117		ASC 5,NO SOURCE!		
0237	11305	000000	ELOCN	NOP	DICBF POINTER	
0238	11306	000000	MVALU	NOP	LOWER SEQUENCE NUMBER	
0239	11307	000000	NVALU	NOP	UPPER SEQUENCE NUMBER	
0240	11310	000000	BTRAK	NOP		
0241	11311	000000	SAVTS	NOP		
0242	11312	000000	DOSM	NOP		
0243	11313	000000	NOFLG	NOP		
0244	11314	007164R	EDTAD	DEF EDTBF		
0245	11315	007163R	MEDTB	DEF EDTBF-1		
0246	11316	007364R	EDTND	DEF EDTBF+128		
0247	11317	027504	DEL	ASC 1,/D		
0248	11320	027505	END	ASC 1,/E		
0249	11321	027511	INS	ASC 1,/I		
0250	11322	027522	REP	ASC 1,/R		
0251	11323	027400	SLUP	OCT 27400		
0252	11324	035000	B35K	OCT 35000		
0253	11325	000050	D40	DEC 40		

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0255* *****
0256* * EDITW/EDT = WRITES A SOURCE STATEMENT TO THE *
0257* * NEWLY EDITED DISC FILE/DICBF: BUFFER). *
0258* * PARAMETERS: *
0259* * DICBF = START OF 64 WORD DISC BUFFER *
0260* * ELOCN = POINTER TO CURRENT LOCN IN DICBF. *
0261* * RONBF+3 = CURRENT TRK/SECTOR TO BE WRITTEN. *
0262* * RONBF+4 = SECTOR COUNTER *
0263* * STLEN = # WORDS IN STATEMENT TO BE MOVED. *
0264* * BFFAD = FWA OF STATEMENT BUFFER *
0265* * INITIALLY: *
0266* * ELOCN = ADDRESS OF DICBF-1 *
0267* * RONBF+3 = 0 *
0268* *****
0269 11326 000000 EDITW NOP
0270 11327 017353R JSB EDT GET LOCN FOR STATEMENT LENGTH
0271 11330 062505R LDA EDLEN GET STATEMENT LENGTH
0272 11331 001727 ALF,ALF
0273 11332 173305R STA ELOCN,I
0274 11333 002003 SZA,RSS END OF EDITED FILE?
0275 11334 026660R JMP EDTX1 YES, GO WRITE LAST SECTOR
0276 11335 050052 CPA,-1 STORING AN END-OF-FILE?
0277 11336 127326R JMP EDITW,I YES - YOU'RE DONE.
0278 11337 001727 ALF,ALF
0279 11340 003004 CMA,INA
0280 11341 073267R STA TERMS SET WORD COUNT
0281 11342 063351R LDA BFFAD
0282 11343 073270R STA SBUFF GET BUFFER ADDRESS
0283 11344 017363R EDTW: JSB EDT
0284 11345 167270R LDB SBUFF,I
0285 11346 177305R STB ELOCN,I STORE A WORD
0286 11347 037270R ISZ SBUFF BUMP ADDRESS
0287 11350 037267R ISZ TERMS ARE ALL WORDS MOVED?
0288 11351 027344R JMP EDTW: NO
0289 11352 127326R JMP EDITW,I YES - RETURN
0290*
0291* * EDT = BUMPS (ELOCN); AT END OF DICBF IT IS *
0292* * WRITTEN TO CURRENT AVAILABLE TRK/SECTOR, *
0293* * IN RONBF+3. ELOCN IS RESET TO L(DICBF). *
0294*
0295 11353 000000 EDT NOP
0296 11354 037305R ISZ ELOCN BUMP POINTER
0297 11355 063305R LDA ELOCN
0298 11356 053316R CPA EDTND
0299 11357 002001 RSS YES
0300 11360 127353R JMP EDT,I NO = EXIT
0301 11361 063311R LDA SAVTS YES = WRITE BUFFER TO DISC
0302 11362 067623R LDB FLUN
0303 11363 077456R STB RWLUN SET CORRECT LUN
0304 11364 006404 CLB,INB
0305 11365 017425R JSB WDISC WRITE THE SECTOR
0306 11366 007164R DEF EDTBF
0307 11367 073311R STA SAVTS SAVE NEXT TRACK/SECTOR
0308 11370 036214R ISZ BONBF+4 BUMP FILE LENGTH
0309 11371 063314R LDA EDTAD
0310 11372 073305R STA ELOCN RESET ELOCN TO START OF DICBF

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0311 11373 127353R      JMP EDT,I
0312 11374 020040      BLNKS ASC 1,
0313 11375              INBUF EQU *
0314*
0315*          * DATE RESET AREA * (GONE AFTER FIRST JOB REQUEST)
0316 11375 017064R DATE1 JSB SCANR      GO SCAN THE DATE STATEMENT
0317 11376 037232R      ISZ PMLOC      BUMP PARAM POINTER
0318 11377 064266        LDB EJ0BF
0319 11400 057374R      CPB BLNKS      IS THIS A RE-READ?
0320 11401 027555R      JMP DATE3      -YES
0321 11402 063477R      LDA LUN2
0322 11403 073456R      STA RWLUN
0323 11404 060115        LDA SYSBF      *
0324 11405 040075        ADA B1774      *
0325 11406 073465R      STA JOBTR      * SAVE
0326 11407 040056        ADA ,+3      *
0327 11410 067354R      LDB WRSYS      *
0328 11411 017345R      JSB DIOP      * OVERLAYABLE
0329 11412 067477R      LDB LUN2      *
0330 11413 077456R      STB RWLUN      *
0331 11414 006404        CLB,INB      *
0332 11415 017425R      JSB WDISC      *
0333 11416 010346R      DEF DICBF      *
0334 11417 067477R      LDB LUN2      *
0335 11420 077456R      STB RWLUN      * CODING
0336 11421 006404        CLB,INB      *
0337 11422 017425R      JSB WDISC      *
0338 11423 007164R      DEF EDTBF      *
0339 11424 060200 DATE2 LDA DISCL
0340 11425 006404        CLB,INB
0341 11426 017415R      JSB RDISC
0342 11427 007164R      DEF EDTBF
0343 11430 067353R      LDB RDSYS      READ IN SYS BUF SECTOR
0344 11431 017356R      JSB SYSB
0345 11432 063567R      LDA XXLBL
0346 11433 067225R      LDB XSYLB
0347 11434 017047R      JSB WMOVE
0348 11435 000003        DEC 3
0349 11436 063164R      LDA EDTBF
0350 11437 066204R      LDB UPAST
0351 11440 053226R      CPA ASCLB
0352 11441 002001        RSS
0353 11442 077122R      STB LBLSV
0354 11443 060042        LDA ,=9      * SAVE 1ST 9 WORDS OF LUN TABLE*
0355 11444 073600R      STA TEMP
0356 11445 060121        LDA LUTAB      GET ADDRESS OF LUN TABLE LOC'N
0357 11446 066650R      LDB SLUNL
0358 11447 077073R      STB SDATE
0359 11450 164000        LDB A,I      GET AN LUN TABLE ENTRY
0360 11451 177073R      STB SDATE,I   STARE IT IN SYS BUFFER AREA
0361 11452 002004        INA          BUMP LUN TABLE POINTER
0362 11453 037073R      ISZ SDATE     BUMP SYS BUFFER POINTER
0363 11454 037600R      ISZ TEMP
0364 11455 027450R      JMP ,=5      ARE WE DONE?
0365 11456 063374R      LDA BLNKS      NO , GO BACK FOR NEXT ENTRY
0366 11457 066771R      LDB XEJOB

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0367	11460	016430R	JSB EXSET	
0368	11461	067374R	LDB BLNKS	B = BLANKS
0369	11462	077073R	STB SDATE	SET DATE BUFFER TO BLANKS
0370	11463	077074R	STB SDATE+1	
0371	11464	077075R	STB SDATE+2	
0372	11465	077076R	STB SDATE+3	
0373	11466	077077R	STB SDATE+4	
0374	11467	167232R	LDB PMLOC, I	
0375	11470	006003	SZB, RSS	IS 'DATE' PARAM PRESENT?
0376	11471	026126R	JMP PMISS	NO: "PARAM MISSING" DIAG.
0377	11472	017625R	JSB PMNXT	
0378	11473	001665	ELA, CLE, ERA	CLEAR PARAMETER TYPE BIT
0379	11474	042513R	ADA DM11	-11
0380	11475	002021	SSA, RSS	MORE THAN 10 CHARS?
0381	11476	003400	CCA	YES) SET A TO GIVE 10 CHARS
0382	11477	042750R	ADA D11	
0383	11500	077504R	STB ++4	STORE PARAM LOCN IN 'MOVE' LINK.
0384	11501	067571R	LDB SDATL	A = NO. CHARS IN DATE
0385	11502	004066	CLE, ELB	SET B = ADDR IN 'DATE' BUFFER
0386	11503	017003R	JSB MOVE	MOVE 'DATE' TO BUFFER
0387	11504	000000	NOP	
0388	11505	002400	CLA	
0389	11506	067566R	LDB XCLOCK	
0390	11507	016430R	JSB EXSET	SET CLOCK = 0
0391	11510	016515R	JSB ASCDC	CHK AND CONVERT ASCII DECIMAL
0392	11511	027524R	JMP DATES	NO - GO TO FINAL CLOCK SETUP
0393	11512	001222	RAL, RAL	MULTIPLY BY DEC60
0394	11513	070001	STA B	SAVE 4X THE #
0395	11514	007004	CMB, INB	FOR SUB FROM 64X THE #
0396	11515	001700	ALF	
0397	11516	040001	ADA B	
0398	11517	067566R	LDB XCLOCK	
0399	11520	016430R	JSB EXSET	CLOCK SET TO MIN. 8.
0400	11521	037232R	ISZ PMLOC	
0401	11522	016515R	JSB ASCDC	CHK AND CONVERT ASCII DECIMAL
0402	11523	000000	NOP	
0403	11524	040104	ADA CLOCK	ADD MINUTES
0404	11525	067566R	LDB XCLOCK	
0405	11526	016430R	JSB EXSET	CLOCK = START TIME
0406	11527	063231R	LDA DM600	SET SECONDS COUNTER
0407	11530	016430R	JSB EXSET	'CLOCK+1' = SECONDS
0408	11531	002404	CLA, INA	
0409	11532	066771R	LDB XEJOB	
0410	11533	016430R	JSB EXSET	
0411	11534	067354R	LDB WR8YS	WRITE 'BUFFER' TO SYS BUF SECTOR
0412	11535	017356R	JSB SYSB	
0413*				
0414*				
0415*				
0416	11536	016001X	JSB EXEC	
0417	11537	011541R	DEF ++2	
0418	11540	011565R	DEF TBREQ	
0419	11541	060161	LDA CUDSC	
0420	11542	006404	CLB, INB	
0421	11543	016162R	JSB JEXUD	
0422	11544	003400	CCA	

* TURN ON TIME BASE GENERATOR *


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0423 11545 006400      CL8
0424 11546 076205R     STB LABEL
0425 11547 016162R     JSB JEXUD
0426 11550 063225R     LDA XSYLB
0427 11551 067570R     LDB XBLBL
0428 11552 017047R     JSB WMOVE
0429 11553 000003      DEC 3
0430 11554 026311R     JMP RNS
0431*
0432 11555 160123      DATE3 LDA JBUFF,I
0433 11556 010075      AND B1774
0434 11557 053324R     CPA B35K      FIRST CHAR. A COLON?
0435 11560 167170R     LDB PMTBL,I   -YES
0436 11561 057564R     CPB DA        DIRECTIVE 'DATE'?
0437 11562 027424R     JMP DATE2     -YES, GO PROCESS
0438 11563 026711R     JMP IGNOR     -NO, REJECT
0439*
0440 11564 042101      DA      ASC 1,DA
0441 11565 177753      TBREQ DEC -21
0442 11566 000104      XCLOK DEF CLOCK
0443 11567 007167R     XXLBL DEF EDTBF+3
0444 11570 002205R     XBLBL DEF LABEL
0445 11571 007073R     SDATL DEF SDATE
0446* *****
0447 11572 000000      BSS INBUF-++128
0448* *****
0449 07063             SNXTS EQU BUFFR+64  NEXT USER FILE T/8(SNXTTS)
0450 07064             SBDTR EQU BUFFR+65  # OF BAD TRACKS
0451 07065             SSPTR EQU BUFFR+66  NEXT AVAIL. SPARE TRACK
0452 07066             STIME EQU BUFFR+67  JOB START TIME           (#2 WORDS)
0453 07070             JNAME EQU BUFFR+69  'JOBNAME' BUFFER         (#3 WORDS)
0454 07073             SDATE EQU BUFFR+72  'DATE' PARAMETER         (#5 WORDS)
0455 07100             SADMP EQU BUFFR+77  ABORT DUMP PARAMS        (#4 WORDS)
0456 07104             SPDMP EQU BUFFR+81  POST-MORT. DUMP PARAMS (#4 WORDS)
0457 07110             JNAM# EQU BUFFR+85  # OF CHARS IN JOBNAME
0458 07111             LUSAV EQU BUFFR+86  9 WORD SAVE AREA FOR LUN TABLE
0459 07122             LBLSV EQU BUFFR+95  DEFAULT USER LABEL      (#3 WORDS)
0460*
0461*
0462 11575             Z      EQU *        LAST LOC + 1 OF PROGRAM
0463                     END JOBPR
** NO ERRORS*

```

SLDEX 00316/04 00382/04 00389/04 00553/04

SLFLO 00326/04 00317/04

• 00010/02 00011/02 00012/02 00013/02 00014/02 00015/02 00016/02
00017/02 00208/02 00215/02 00218/02 00323/02 00326/02 00341/02
00377/02 00426/02 00473/02 00496/02 00552/02 00572/02 00002/03
00025/03 00032/03 00064/03 00080/03 00087/03 00097/03 00114/03
00243/03 00258/03 00259/03 00310/03 00320/03 00320/03 00332/03
00335/03 00366/03 00390/03 00428/03 00444/03 00446/03 00463/03
00524/03 00570/03 00582/03 00631/03 00010/04 00013/04 00031/04
00051/04 00053/04 00233/04 00236/04 00267/04 00274/04 00290/04
00292/04 00377/04 00405/04 00425/04 00426/04 00455/04 00461/04
00465/04 00509/04 00520/04 00532/04 00545/04 00574/04 00575/04
00112/05 00139/05 00148/05 00230/05 00333/05 00342/05 00453/05
00455/05 00492/05 00063/06 00163/06 00155/06 00197/06 00221/06
00247/06 00274/06 00279/06 00306/06 00321/06 00344/06 00381/06
00388/06 00395/06 00419/06 00426/06 00470/06 00472/06 00490/06
00562/06 00592/06 00052/07 00130/07 00132/07 00134/07 00143/07
00166/07 00170/07 00175/07 00191/07 00197/07 00210/07 00225/07
00247/07 00256/07 00277/07 00307/07 00312/07 00315/07 00352/07
00414/07 00022/08 00029/08 00038/08 00065/08 00075/08 00085/08
00121/08 00132/08 00211/08 00330/08 00339/08 00343/08 00350/08
00357/08 00359/08 00390/08 00413/08 00440/08 00441/08 00442/08
00446/08 00449/08 00455/08 00459/08 00461/08 00510/08 00552/08
00563/08 00566/08 00007/09 00009/09 00020/09 00030/09 00054/09
00077/09 00091/09 00098/09 00139/09 00220/09 00251/09 00269/09
00271/09 00276/09 00289/09 00303/09 00305/09 00327/09 00335/09
00357/09 00369/09 00372/09 00440/09 00451/09 00454/09 00455/09
00457/09 00561/09 00566/09 00571/09 00584/09 00588/09 00598/09
00607/09 00611/09 00613/09 00628/09 00661/09 00707/09 00057/10
00247/10 00311/10 00329/10 00372/10 00435/10 00472/10 00522/10
00530/10 00565/10 00006/11 00051/11 00054/11 00079/11 00199/11
00205/11 00208/11 00276/11 00326/11 00354/11

..RRL 00341/04 00398/02 00438/02 00052/03 00189/04 00343/04 00346/04
00352/04 00363/04 00437/06 00456/06 00242/08 00260/08 00263/08
00557/08 00144/10

.RRL1 00347/04 00351/04

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A 00007/02 00088/03 00260/03 00394/03 00414/03 00009/04 00136/04
00234/04 00271/04 00370/04 00463/04 00483/04 00498/04 00544/04
00548/04 00602/04 00347/05 00452/05 00468/05 00110/06 00112/06
00445/06 00543/06 00023/07 00063/07 00293/07 00042/08 00175/08
00392/08 00569/08 00184/09 00462/09 00572/09 00630/09 00058/10
00024/11 00028/11 00050/11 00359/11

AO 00501/03 00144/08

A00 00446/04 00420/04 00265/08

ABFL 00227/03 00141/02 00223/02 00228/02 00382/02 00418/02 00484/06

ABINF 00118/09 00136/02 00244/06 00044/07 00350/07 00412/07 00016/09
00036/09 00231/10

ABORT 00495/06 00147/03

ADMP2 00594/03 00581/03

ADMP3 00599/03 00596/03 00620/03

ADMP4 00605/03 00598/03

ADMP6 00608/03 00633/03 00638/03

ADMP7 00621/03 00569/03

ADMP8 00630/03 00622/03

ADMP9 00635/03 00568/03

ADMPX 00609/03 00580/03 00591/03 00602/03

ADONE 00323/07 00306/07

ADSET 00237/08 00218/08 00219/08 00221/08 00222/08 00224/08 00225/08
00257/08 00567/08

ADUMP 00556/03 00157/03 00554/03

AEJ 00214/03 00168/02 00406/02

AJO 00142/03 00166/02 00404/02 00445/02

ALLSC 00143/06 00134/06

ANO 00423/06 00486/02 00487/02 00172/04 00129/06 00317/07

ANVAL 00268/08 00216/08 00245/08 00550/08

AOF 00192/03 00453/02 00027/07 00456/10 00488/10

ASCDC 00401/04 00233/03 00257/03 00298/03 00365/03 00399/03 00477/03
00088/04 00176/04 00195/04 00381/04 00404/04 00407/04 00408/04
00528/04 00270/06 00462/07 00382/08 00401/08 00417/08 00097/09
00639/09 00648/09 00667/09 00250/10 00358/10 00362/10 00031/11
00089/11 00093/11 00391/11 00401/11

ASCER 00532/04 00524/04

ASCH1 00531/04 00540/04

ASCH5 00536/04 00530/04
 ASCH8 00551/04 00546/04
 ASCHR 00528/04 00485/04 00497/04 00500/04
 ASCLB 00213/03 00520/02 00351/11
 ASCN1 00490/04 00517/04
 ASCNT 00555/04 00488/04 00516/04
 ASCNV 00477/04 00571/03 00583/03 00275/04 00406/04 00521/04 00030/08
 00039/08
 ASCNW 00479/04 00550/04
 ASCOV 00523/04 00505/04 00507/04 00512/04 00515/04
 ASCSY 00168/04 00074/04 00077/04 00079/04
 ASKER 00305/07 00262/07
 ASKX 00306/07 00321/07
 ASMOD 00556/04 00478/04 00495/04 00508/04
 ASO 00191/03 00665/09
 *ASS 00193/03
 AYES 00327/07 00319/07
 B 00008/02 00193/02 00397/02 00436/02 00508/02 00033/03 00089/03
 00333/03 00340/03 00343/03 00519/03 00560/03 00562/03 00564/03
 00566/03 00011/04 00016/04 00050/04 00192/04 00484/04 00019/05
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 00197/08 00292/08 00296/08 00298/08 00248/09 00250/09 00252/09
 00255/09 00336/09 00340/09 00343/09 00562/09 00567/09 00569/09
 00574/09 00641/09 00650/09 00001/10 00367/10 00451/10 00455/10
 00052/11 00057/11 00060/11 00100/11 00111/11 00209/11 00213/11
 00394/11 00397/11
 B1000 00108/09 00087/09
 B101 00499/06 00331/06
 B102 00380/05 00595/03 00623/03 00382/05 00328/06
 B103 00381/05 00364/05 00383/05 00032/06
 B1100 00113/09 00440/03 00003/09
 *B1106 00223/03

B114	00640/03	00605/03	00621/03				
B116	00641/03	00289/04					
B120	00500/06	00254/06	00264/06	00514/06			
B120K	00501/06	00405/06	00417/06				
B122	00503/06	00276/06	00322/06				
B123	00615/03	00325/06	00362/06	00469/07	00488/07	00500/07	00525/07
	00540/07	00228/08					
B125	00554/07	00471/07	00517/07	00165/09			
B130	00555/07	00333/06	00360/06	00474/07	00161/09		
B14	00506/06	00342/06	00463/08				
B160K	00112/06	00403/06					
B177	00015/02	00206/03	00012/04	00235/04	00172/08	00210/08	00393/08
	00337/09	00453/09	00246/10	00053/11			
B1774	00017/02	00147/02	00161/02	00059/04	00029/05	00351/05	00461/05
	00486/05	00200/06	00443/06	00571/06	00024/07	00204/07	00168/08
	00291/08	00164/09	00187/09	00351/10	00422/10	00453/10	00483/10
	00603/10	00203/11	00215/11	00324/11	00433/11		
B200	00193/10	00002/10					
B2010	00119/09	00553/09					
B2037	00274/08	00198/08	00207/08	00215/08			
B20K	00391/04	00440/05					
B2300	00507/06	00040/07					
B240	00519/07	00260/07					
B26	00047/09	00457/08					
B300	00502/06	00372/06					
*B3400	00533/03						
B35K	00252/11	00162/02	00572/06	00295/07	00425/10	00484/10	00434/11
B37	00013/02	00334/03					
B377	00016/02	00400/02	00441/02	00306/03	00369/04	00605/04	00008/05
	00022/05	00211/05	00222/05	00355/05	00020/06	00217/06	00018/07
	00142/07	00190/07	00270/07	00186/08	00190/08	00194/08	00490/08
	00253/09	00383/09	00703/09	00080/10	00449/10	00190/11	

B40	00499/03 00117/05 00128/05 00179/05 00208/07 00169/08 00276/08 00335/08
B400	00220/03 00563/02 00267/03 00045/07 00248/07 00295/08 00439/09 00680/09 00093/10
B401	00325/07 00313/07
B414	00508/06 00548/06
B500	00362/08 00346/08
B52K	00275/08 00191/08
B54	00187/05 00538/04 00181/05
B60	00163/04 00142/04
B700	00221/03 00110/03
B72	00219/03 00401/02 00442/02
B77	00014/02 00552/06 00012/07 00039/07 00086/09 00547/09 00625/09
B7777	00561/04 00547/04
BATCH	00029/02 00174/02 00375/02 00379/02 00419/02 00455/02 00562/02 00585/02 00199/03 00030/04 00128/04 00303/06 00477/06 00495/06 00555/06 00445/10
RDCTL	00201/02 00427/02 00173/04
BELLS	00003/07 00559/06
BFEND	00517/09 00363/09
BFFAD	00262/05 00377/06 00387/06 00564/06 00046/07 00055/07 00361/07 00417/07 00508/08 00039/09 00140/09 00281/09 00310/09 00414/10 00417/10 00498/10 00281/11
BGLBL	00549/07 00541/07
BLNKS	00312/11 00308/02 00429/02 00044/04 00446/05 00062/08 00495/08 00568/08 00576/08 00577/08 00247/09 00319/11 00368/11 00368/11
BM1K	00222/03 00060/03
BM20	00111/09 00560/08
BM60	00562/04 00494/04
BM72	00188/05 00136/05
BMM5G	00240/05 00231/05

BMPNT	00532/03	00536/03	00599/03	00608/03	00626/03	00627/03	00635/03
	00636/03	00637/03					
BONBF	00195/10	00194/10	00244/10	00245/10	00267/10	00269/10	00271/10
	00273/10	00282/10	00285/10	00288/10	00296/10	00543/10	00557/10
	00567/10	00570/10	00575/10	00587/10	00594/10	00599/10	00602/10
	00308/11						
BONLC	00194/10	00238/10	00553/10				
BTRAK	00240/11	00389/10	00427/10	00431/10	00105/11		
BUFFR	00145/09	00124/03	00262/05	00384/06	00386/06	00402/06	00404/06
	00416/06	00060/08	00061/08	00063/08	00107/08	00487/08	00496/08
	00497/08	00498/08	00499/08	00500/08	00142/09	00517/09	00421/10
	00448/10	00482/10	00449/11	00450/11	00451/11	00452/11	00453/11
	00454/11	00455/11	00456/11	00457/11	00458/11	00459/11	
CBIN	00247/03	00234/03					
CDCN2	00221/11	00139/11	00151/11	00152/11	00157/11	00164/11	00222/11
CDCNT	00109/07	00359/06	00575/06	00588/06	00026/08	00055/08	00068/08
	00073/08	00082/08	00564/08	00571/08	00295/10	00343/10	00371/10
	00390/10	00397/10	00404/10	00409/10	00100/11	00124/11	00126/11
	00195/11						
CHARC	00071/02	00468/03					
CHARS	00186/03	00170/02	00187/02	00408/02	00447/02	00449/02	00451/02
	00171/06	00029/07	00030/07	00458/10	00486/10		
CKENT	00203/05	00228/05					
CKJBS	00379/05	00242/05					
CKT60	00242/05	00229/05					
CKT99	00246/05	00209/05	00220/05	00226/05			
CKTRK	00204/05	00227/05	00249/05	00360/05	00300/08		
CL.1	00240/03	00268/03					
CLC0	00224/03	00236/02					
CLEAR	00233/03	00170/03					
CLEX	00027/02	00156/02	00285/02	00290/02	00198/03	00297/04	00299/04
CLOCK	00026/02	00267/02	00270/02	00524/02	00526/02	00061/03	00403/11
	00442/11						
CMPNX	00055/06	00017/06	00065/06	00066/06	00069/06		
CNDEC	00419/04	00275/02	00287/02	00544/02	00049/03	00444/04	00589/06

00059/08 00187/08 00195/08 00203/08 00555/08 00595/09

CNMBR 00448/04 00421/04 00422/04 00423/04 00424/04 00442/04 00443/04
00206/08

CNMLC 00447/04 00427/04 00431/04 00432/04 00437/04 00438/04 00439/04

CNOCT 00259/08 00244/08 00249/08 00253/08 00266/08

CNORG 00426/04 00440/04

CNOUT 00442/04 00429/04 00434/04

CNSEC 00048/03 00279/02 00293/02 00549/02 00056/03

CODBF 00483/09 00477/09

CODIN 00476/09 00141/09 00290/09 00484/09 00313/10 00474/10 00081/11

COLF 00505/06 00243/06 00558/06 00008/07 00288/07 00233/10

COLTS 00287/07 00265/07

CSAVE 00189/05 00205/05 00213/05 00224/05 00246/05

CTEST 00108/07 00251/06 00271/06 00320/06 00354/06 00428/06 00449/06
00455/06 00492/06 00467/07 00487/07 00496/07 00516/07 00539/07
00550/07 00124/08 00227/08

CTS2 00224/11 00058/11 00142/11

CUDSC 00052/02 00207/03 00284/03 00020/04 00217/05 00304/05 00094/06
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00274/10 00277/10 00469/10 00063/11 00071/11 00419/11

CURTS 00001/06 00282/03 00294/03 00401/05 00019/06 00024/06 00030/06
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00397/08 00414/08 00416/08 00525/09 00528/09 00646/09 00654/09
00656/09 00286/10 00042/11 00077/11 00134/11 00143/11 00191/11
00202/11 00210/11 00214/11

CW 00246/03 00236/03 00239/03 00240/03 00244/03 00263/03 00266/03
00441/03 00445/03

CXMX 00028/02 00202/03

D11 00116/09 00451/08 00382/11

D12 00356/03 00382/03

D13 00500/03 00462/03 00288/06 00212/08

D16 00191/05 00132/05

D17 00011/02

D203 00208/05 00247/05 00421/09
D23 00575/09 00555/02 00152/04
D27 00426/03 00431/03
D28 00427/03 00432/03
D300 00642/03 00300/04
D32 00276/08 00343/02 00058/09 00061/09
D34 00112/09 00574/08
D36 00158/08 00575/02 00490/07 00226/08
D40 00253/11 00565/06 00525/10
D60 00504/06 00376/06
D600 00215/03 00273/02 00292/02 00548/02
D64 00012/02 00443/08 00472/08 00475/08 00476/08 00022/09 00100/09
D99 00206/04 00178/04
DA 00440/11 00436/11
DATE 00061/03 00430/02 00148/03
DATE1 00316/11 00063/03
DATE2 00339/11 00437/11
DATE3 00432/11 00320/11
DATES 00403/11 00392/11
DBCOL 00326/07 00264/07
DCALL 00421/09 00304/09
DCSTR 00126/07 00105/07 00162/07 00185/07 00192/07 00355/09 00574/10
DCSYS 00402/09 00306/09
DCU10 00308/09 00323/09 00365/09
DCU13 00312/09 00366/09
*DCU15 00318/09
DCULP 00359/09 00175/06 00374/09
DOALL 00276/09 00159/09 00272/09

DDCMP 00281/09 00126/04
DDDUJ 00368/09 00333/09
DDFIN 00430/09 00321/09 00419/09
DDFLG 00500/09 00172/02 00394/02 00461/02 00590/02 00064/04 00000/04
00105/04 00123/04 00206/05 00236/05 00173/06 00277/09 00302/09
00437/09 00446/09
DDIBF 00471/09 00172/09 00202/09
DDIO 00460/09 00226/09 00270/09 00316/09 00469/09 00472/09
DDLUN 00507/09 00182/09 00233/09 00461/09
DDOBF 00468/09 00173/09 00283/09
DDOWN 00600/09 00597/09
DDRD 00470/09 00465/09
DDRMV 00265/09 00258/09
DDRNM 00237/09 00189/09
DDSYS 00274/09 00162/09
DDTS 00509/09 00170/09 00227/09 00309/09 00463/09
DDU10 00183/09 00202/09
DDU20 00199/09 00221/09 00246/09 00266/09
DDU30 00204/09 00195/09
DDU35 00210/09 00230/09
DDU40 00223/09 00216/09
DDUAL 00232/09 00178/09
DDUMP 00139/09 00167/03
DDUXT 00268/09 00201/09
DDUXX 00271/09 00236/09
DDXF1 00390/09 00400/09
DDXFR 00388/09 00350/09 00392/09 00394/09 00428/09
DEL 00247/11 00383/10 00412/10
DEL10 00188/06 00194/06

DEL15 00192/06 00203/06
DEL20 00196/06 00190/06
DEL30 00206/06 00187/06 00193/06
DELET 00186/06 00165/03 00172/06
DFLBL 00153/04 00259/02 00054/04
DFRNS 00115/09 00095/09
DICAD 00029/06 00042/06 00067/06 00145/07 00193/07 00096/09 00312/10
00473/10 00080/11
DICBF 00315/10 00316/03 00349/03 00006/06 00021/06 00029/06 00224/06
00333/11
DICBL 00227/11 00307/10 00464/10 00476/10 00041/11 00083/11
DICND 00006/06 00061/06 00127/07 00180/07
DIGIT 00557/04 00501/04 00513/04
DIO 00267/05 00269/05 00261/05
DIOP 00258/05 00263/05 00278/05 00285/05 00328/11
DIR8R 00443/05 00226/04 00467/05 00493/05 00494/05 00088/06 00113/06
00535/07 00192/09 00330/09 00558/10
DISCB 00311/05 00305/05 00306/05
DISCL 00056/02 00143/02 00156/04 00284/05 00679/09 00092/10 00339/11
DISCO 00045/02 00368/04 00210/05
DISCR 00406/07 00411/07 00429/07 00431/07 00447/07 00053/08 00501/08
00033/09 00340/10 00394/10 00406/10 00539/10 00120/11 00148/11
00162/11
DISCW 00347/07 00400/06 00574/06 00066/07 00360/07 00370/07
DM11 00392/04 00243/04 00379/11
DM16 00165/05 00547/08 00111/09
DM21 00218/03 00243/02
DM22 00217/03 00240/02
DM600 00216/03 00534/02 00306/04 00406/11
DMOVE 00459/05 00445/05
DMP02 00429/08 00402/08

*DMPAD 00555/03

DMPC1 00495/08 00492/08 00519/08

DMPC2 00503/08 00518/08 00521/08 00524/08

DMPC4 00520/08 00502/08

DMPCX 00526/08 00512/08

DMPL0 00536/08 00540/08

DMPL2 00561/08 00579/08

DMPL3 00567/08 00572/08

DMPR1 00031/09 00046/09

DMPR2 00033/09 00041/09

DMPR4 00043/09 00034/09

DMPSC 00546/08 00538/08 00010/09

DMTST 00071/09 00478/08 00539/08 00064/09 00073/09 .

DMT8X 00076/09 00528/08 00045/09

DNBUF 00112/07 00380/07 00440/07 00048/08 00565/08 00573/08 00031/09
00029/10 00086/10 00301/10 00140/11

DOSM 00242/11 00138/02 00281/10 00289/10 00562/10 00582/10 00589/10
00598/10

DRADD 00450/09 00057/06 00207/09 00325/09 00458/09 00025/10

DRADR 00514/09 00206/09 00217/09

DRCUR 00510/09 00174/09 00210/09 00211/09 00218/09 00224/09 00246/09
00262/09

DRLNG 00220/09 00208/09 00229/09

DRNXT 00511/09 00169/07 00175/09 00209/09 00212/09 00268/09 00311/09
00319/09 00324/09 00328/09 00334/09 00360/09 00361/09

DRORD 00438/07 00407/07 00424/07 00451/07

DRSR2 00471/05 00477/05 00483/05 00489/05

DRSRX 00491/05 00474/05

DRTMP 00512/09 00088/09 00092/09 00101/09 00326/09 00359/09

DSCLU 00610/09 00083/03 00235/03 00367/03 00324/08 00099/09 00615/09

00252/10

DSCR2 00424/07 00421/07 00428/07

DSCW2 00364/07 00369/07

DUMP 00382/08 00164/03

DUMPA 00052/09 00452/08 00066/09 00667/09

DUMPB 00057/09 00063/09

DUMPC 00484/08 00450/08

DUNPD 00470/08 00479/08 00026/09

DUMPL 00534/08 00455/08 00458/08 00460/08 00666/09

DUMPR 00021/09 00462/08

DUMPS 00031/02 00203/03 00616/03

DUMPX 00015/09 00464/08

DVTMP 00467/04 00453/04 00456/04 00464/04

DVU00 00454/04 00458/04

DVU01 00455/04 00460/04

DVUKN 00451/04 00430/04 00435/04 00466/04

DWD4 00448/07 00525/08

DWD5 00449/07 00442/07

DWRD 00377/07 00411/06 00415/06 00577/06 00580/06 00583/06 00072/07
00076/07 00348/07 00364/07 00382/07 00387/07

EA 00379/03 00174/03

EAEB1 00399/03 00405/03

EAEB2 00410/03 00400/03

EAEB3 00394/03 00398/03

EAEB4 00419/03 00433/03

EB 00381/03 00175/03

*EDILG 00350/10

EDINP 00517/10 00322/10 00415/10 00528/10

EDIT 00230/10 00166/03

EDIT0 00431/10 00424/10 00446/10
EDIT1 00277/10 00263/10
EDIT2 00282/10 00276/10
EDIT3 00323/10 00433/10
EDIT4 00383/10 00378/10
EDIT5 00386/10 00381/10 00384/10 00398/10
EDIT6 00400/10 00392/10 00410/10
EDIT7 00411/10 00405/10
EDIT8 00414/10 00429/10
EDIT9 00428/10 00402/10 00447/10 00460/10
EDITA 00464/10 00425/02
EDITB 00501/10 00492/10
EDITC 00480/10 00466/10
EDITF 00128/03 00134/02 00224/02 00393/02 00423/02 00591/02 00238/05
00350/10 00388/10 00437/10 00481/10 00022/11 00104/11
EDITM 00021/11 00511/10
EDITR 00321/10 00413/10 00008/11 00014/11 00197/11 00212/11
EDITS 00006/11 00507/10
EDITU 00012/11 00509/10
EDITW 00269/11 00393/10 00428/10 00538/10 00546/10 00123/11 00156/11
00277/11 00289/11
EDITX 00538/10 00339/10 00346/10 00542/10
EDLEN 00420/10 00342/10 00396/10 00408/10 00416/10 00478/10 00496/10
00541/10 00545/10 00044/11 00085/11 00122/11 00130/11 00150/11
00165/11 00189/11 00271/11
EDN 00602/09 00563/09 00594/09 00596/09
EDNEW 00582/10 00577/10
EDT 00295/11 00270/11 00283/11 00300/11 00311/11
EDT10 00442/10 00426/10
EDTAD 00244/11 00171/09 00228/09 00288/09 00309/11

EDTBF 00295/09 00552/10 00244/11 00245/11 00246/11 00306/11 00338/11
00342/11 00349/11 00443/11

EDTM1 00035/11 00030/11

EDTM2 00117/11 00108/11 00128/11

EDTM3 00130/11 00113/11 00182/11

EDTM4 00146/11 00155/11

EDTM5 00156/11 00166/11

EDTM7 00167/11 00163/11

EDTM8 00171/11 00090/11

EDTM9 00103/11 00097/11 00175/11

EDTND 00246/11 00214/09 00298/11

EDT8 00333/10 00326/10

EDTS1 00340/10 00336/10

EDTW1 00283/11 00288/11

EDTX1 00543/10 00275/11

EDTX2 00553/10 00600/10 00002/11

EDTX3 00602/10 00561/10

EDTXY 00575/10 00564/10

EFMP 00066/02 00209/03

EJOB 00215/02 00169/02 00407/02 00479/06

EJOBF 00063/02 00151/02 00230/02 00334/02 00364/02 00428/02 00129/03
00318/11

EJOBX 00471/06 00131/04 00324/04 00285/06 00497/06 00031/07 00199/07
00459/10 00487/10

ELOCN 00237/11 00304/10 00273/11 00285/11 00296/11 00297/11 00310/11

END 00248/11 00334/10 00345/10

ENDFL 00119/07 00448/06 00465/06 00045/08 00069/08 00678/09 00003/10

ENJP5 00133/03 00300/02

ENTLN 00040/10 00319/06 00347/06 00358/06 00464/06 00587/06 00098/07
00160/07 00384/07 00445/07 00050/08 00052/08 00202/08 00400/08

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	00029/09	00043/09	00072/09	00344/09	00354/09	00390/09	00396/09
	00423/09	00660/09	00026/10	00042/10	00160/10	00161/10	00172/10
	00176/10	00284/10	00569/10	00136/11	00145/11	00187/11	
ENTSC	00114/07	00340/06	00157/07	00347/09	00571/10		
ENTYP	00113/07	00336/06	00131/07	00154/07	00165/07	00394/08	00448/08
	00338/09	00565/10					
EOFER	00530/10	00010/07	00348/10	00395/10	00407/10	00527/10	00149/11
	00169/11	00178/11					
EOFFL	00226/11	00306/10	00337/10	00117/11	00180/11		
EOTST	00107/03	00005/03	00007/03	00009/03	00084/03	00109/03	00116/03
	00353/06	00261/10					
EQ	00498/03	00149/03					
EQCNT	00494/03	00388/03	00402/03	00411/03	00474/03	00483/03	00489/03
	00378/04	00387/04	00551/04				
EQLST	00492/03	00574/03	00585/03				
EQP	00109/09	00573/09					
EQPNT	00495/03	00534/03	00535/03	00557/03	00572/03	00575/03	00577/03
	00584/03	00588/03	00594/03	00597/03	00630/03	00632/03	00380/04
	00383/04	00385/04	00541/04	00280/05			
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EQT4	00057/02	00307/08	00309/08				
EQTAB	00036/02	00570/09					
EQTNM	00493/03	00075/03	00079/03	00082/03	00085/03	00476/03	00480/03
ERLST	00136/08	00214/07	00133/08	00140/08	00142/08		
ERMES	00302/06	00283/06	00305/06	00314/06	00315/06	00521/07	
ERRDG	00569/04	00179/02	00378/02	00498/02	00023/03	00066/03	00583/04
	00150/05	00234/05	00164/06	00169/06	00198/06	00282/06	00289/06
	00471/06	00476/06	00563/06	00594/06	00308/07	00141/08	00341/08
	00358/09	00370/09	00373/09	00604/09	00332/10	00523/10	
ETYPE	00102/08	00105/08	00106/08	00174/08			
EXCES	00157/05	00149/05					
EXEC	00004/02	00206/02	00238/02	00241/02	00570/02	00112/03	00241/03
	00416/03	00442/03	00460/03	00150/04	00321/04	00335/04	00572/04
	00361/05	00284/07	00310/07	00328/08	00348/08	00355/08	00005/09
	00089/09	00605/09	00416/11				

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 EXPG 00044/02 00393/04
 EXPGL 00393/04 00242/04
 EXSET 00334/04 00158/02 00217/02 00220/02 00250/02 00253/02 00369/02
 00465/02 00467/02 00468/02 00470/02 00471/02 00472/02 00474/02
 00476/02 00478/02 00480/02 00482/02 00484/02 00489/02 00533/02
 00535/02 00593/02 00596/02 00598/02 00008/03 00099/03 00249/03
 00250/03 00286/03 00458/03 00618/03 00018/04 00019/04 00022/04
 00202/04 00246/04 00252/04 00253/04 00254/04 00255/04 00256/04
 00296/04 00307/04 00312/04 00315/04 00320/04 00338/04 00344/04
 00350/04 00375/04 00376/04 00384/04 00582/04 00591/04 00592/04
 00300/05 00307/05 00310/08 00382/09 00385/09 00126/10 00065/11
 00367/11 00390/11 00399/11 00405/11 00407/11 00410/11
 EXTIM 00138/03 00288/02 00289/02 00294/02 00295/02
 FLN2 00223/11 00062/11 00144/11
 FLUN 00032/06 00150/02 00223/04 00316/04 00025/06 00086/06 00478/07
 00529/07 00558/07 00404/09 00427/09 00683/09 00177/10 00300/10
 00548/10 00556/10 00593/10 00037/11 00068/11 00302/11
 FNILL 00162/06 00463/05 00466/05 00024/08
 FNILM 00177/06 00166/06
 FNUND 00206/07 00230/04 00191/06 00267/06 00215/07 00520/07 00542/07
 00196/09
 FWPRG 00233/08 00217/08
 GETC 00600/04 00527/03 00287/04 00492/04 00537/04 00606/04 00127/05
 00178/05 00118/08
 GETEX 00025/06 00046/06
 GETNX 00016/06 00471/05 00018/06 00023/06 00031/06 00048/06 00524/06
 00509/07 00064/10
 GUDSC 00054/02 00360/02 00503/02
 HSBUF 00114/09 00055/09 00062/09
 IGN 00582/02 00065/03
 IGNOR 00064/03 00457/02 00588/02 00182/03 00033/04 00490/06 00438/11
 ILDIG 00534/04 00531/04
 INB63 00111/07 00409/06 00070/07
 INBUF 00313/11 00511/02 00518/02 00211/03 00454/06 00090/07 00110/07

	00111/07	00112/07	00021/08	00162/08	00165/08	00170/08	00173/08
	00176/08	00181/08	00188/08	00192/08	00196/08	00199/08	00204/08
	00205/08	00208/08	00209/08	00233/08	00561/08	00562/08	00114/09
	00413/09	00418/09	00527/09	00084/10	00181/10	00189/10	00447/11
INCHK	00133/04	00117/04					
INDSC	00030/04	00169/03					
INFL	00226/03	00140/02	00222/02	00227/02	00385/02	00417/02	00569/06
	00309/10						
INLEN	00117/07	00243/07	00259/07	00548/08	00578/08		
INLUN	00118/07	00348/06	00352/06	00369/06	00373/06	00551/06	00560/06
	00011/07	00038/07	00041/07	00246/07	00253/10	00260/10	00328/10
	00442/10	00520/10					
INPUT	00561/02	00387/02	00410/02	00413/02	00578/02		
INS	00249/11	00376/10	00401/10				
IU1	00082/04	00042/04					
IU2	00088/04	00061/04	00073/04	00081/04			
IU2.5	00099/04	00145/04					
IU3	00105/04	00089/04					
IU3.5	00108/04	00087/04					
IU4	00111/04	00104/04					
IU5	00128/04	00122/04					
IUFLG	00161/04	00036/04	00071/04	00082/04	00112/04	00115/04	00149/04
	00155/04						
JBAB	00486/06	00473/06					
JBINC	00024/02	00216/05	00431/06	00434/06			
JBINS	00021/02	00200/03	00359/04	00425/06			
JBINV	00488/06	00469/06					
JBUFF	00040/02	00160/02	00177/02	00391/02	00395/02	00433/02	00434/02
	00574/02	00099/05	00107/05	00308/06	00321/10	00331/10	00344/10
	00349/10	00375/10	00400/10	00411/10	00418/10	00482/10	00497/10
	00505/10	00432/11					
JEXUD	00147/04	00362/02	00505/02	00113/04	00159/04	00342/04	00345/04
	00151/06	00314/09	00489/09	00471/10	00073/11	00421/11	00425/11
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JFILE 00005/04 00154/03
JFILS 00041/02 00201/03
*JFLSC 00055/02
JMP 00424/03 00413/03
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JNAME 00453/11 00309/02 00310/02 00311/02 00497/03
JNAML 00497/03 00299/02 00321/02 00539/02
JOB 00226/02 00167/02
JOB01 00236/02 00225/02
JOB03 00306/02 00232/02
JOB05 00331/02 00315/02 00318/02
JOB10 00364/02 00336/02
JOB11 00459/02 00366/02
JOB16 00328/02 00313/02
JOB20 00503/02 00495/02
JOB8 00455/02 00444/02
JOBEN 00155/02 00405/02 00409/02 00450/02
JOBFL 00225/03 00142/02 00229/02 00246/02 00346/02
JOBPR 00132/02 00005/02 00432/02 00463/11
JOBTR 00508/09 00148/02 00480/09 00325/11
JOBTS 00192/02 00197/02
JOBUF 00141/03 00545/02 00546/02 00550/02 00551/02 00556/02 00144/03
JOBUG 00144/03 00540/02
JPNTR 00163/05 00111/05 00121/05 00123/05 00143/05 00175/05 00184/05
00691/09 00027/10 00033/10 00036/10 00038/10 00041/10 00043/10
00077/10 00085/10
JSFLG 00205/04 00462/02 00175/04 00191/04 00193/04 00200/04 00122/06
00128/06 00140/06 00145/06
JSRC1 00175/05 00185/05

JSRCH	00173/05	00115/05	00144/05	00177/05	00182/05	00093/06	00098/06
LABEL	00167/04	00040/04	00045/04	00046/04	00047/04	00058/04	00075/04
	00076/04	00078/04	00118/04	00141/04	00144/04	00153/04	00424/11
	00444/11						
LBLIO	00283/05	00123/03	00286/05	00297/05	00309/05	00293/09	00432/09
	00443/09						
LBLMV	00057/04	00043/04					
LBLSV	00459/11	00522/02	00212/03	00353/11			
LEADR	00084/09	00353/08	00360/08	00447/08	00057/09	00060/09	00078/09
	00093/09	00096/09					
LIST	00460/07	00163/03					
LIST1	00503/07	00514/07					
LIST2	00508/07	00512/07					
LIST3	00534/07	00548/07					
LIST4	00525/07	00499/07	00551/07				
LIST5	00479/07	00470/07	00472/07				
LIST6	00553/07	00479/07	00505/07	00536/07	00006/08		
LIST7	00544/07	00538/07					
LIST8	00533/07	00526/07					
LIST9	00515/07	00002/08					
LISTH	00091/08	00486/07					
LNBUF	00090/07	00584/06	00385/07	00443/07	00156/08	00230/08	00471/08
	00474/08	00484/08	00551/08	00056/09	00690/09	00697/09	00035/10
LSEN7	00227/08	00214/06					
LSENT	00154/08	00508/07	00544/07	00232/08			
LST05	00321/08	00361/08					
LST10	00353/08	00344/08					
LSTBF	00332/08	00021/03	00038/03	00319/08			
LSTBL	00105/08	00022/03	00039/03	00320/08	00333/08		
LSTCH	00067/02	00326/04					
LSTIO	00318/08	00040/03	00310/06	00313/06	00482/06	00491/07	00067/08

	00077/08	00139/08	00231/08	00327/08	00337/08	00473/08	00477/08
	00515/08	00527/08	00575/08	00040/09	00059/09		
LSTLN	00269/08	00026/03	00036/03	00307/06	00466/07	00484/07	00322/08
	00331/08	00345/08	00385/08	00433/08	00437/08	00439/08	00444/08
	00504/08	00002/09	00021/09	00023/09	00005/09	00662/09	
LSTR1	00232/04	00219/04	00229/04				
LSTRA	00327/04	00303/04	00311/04	00313/04			
LSTRT	00215/04	00257/04	00263/04	00327/04	00358/04		
LSTSC	00047/02	00101/04	00108/04	00185/04	00198/04		
LUCH1	00559/09	00608/09					
LUCH3	00588/09	00078/03	00262/03	00556/06	00465/07	00546/09	00552/09
	00612/09	00614/09					
LUCH4	00594/09	00579/09					
LUCH6	00604/09	00599/09					
LUCHK	00544/09	00566/02	00028/03	00081/03	00238/03	00265/03	00370/03
	00251/07	00325/08	00438/08	00103/09	00565/09	00583/09	00585/09
	00587/09	00256/10					
LUN2	00382/05	00222/04	00318/04	00275/05	00450/06	00477/07	00530/07
	00559/07	00181/09	00403/09	00478/09	00299/10	00592/10	00321/11
	00329/11	00334/11					
LUN3	00383/05	00149/02	00369/05	00085/06	00232/09	00426/09	00602/09
	00297/10	00555/10					
LUNIT	00330/07	00249/07	00267/07				
LUSAV	00458/11	00014/03					
LUT#	00039/02	00072/03	00550/09				
LUTAB	00038/02	00006/03	00031/03	00034/03	00006/03	00560/09	00629/09
	00356/11						
LUTST	00586/09	00558/09					
LWAVL	00020/02	00141/10					
MCNTR	00041/05	00010/05	00014/05	00036/05			
MDEST	00040/05	00007/05	00024/05	00034/05			
MEDTB	00245/11	00303/10					
MER	00230/11	00510/10					

MINRF	00110/07	00355/06	00155/08				
MITRK	00231/06	00353/03	00228/06				
MLOCN	00496/05	00444/05	00464/05	00472/05	00478/05	00490/05	00043/06
	00056/06	00058/06	00059/06	00060/06	00068/06	00188/06	00199/06
	00201/06	00337/06	00356/06	00408/06	00413/06	00520/06	00579/06
	00582/06	00069/07	00074/07	00104/07	00129/07	00138/07	00146/07
	00148/07	00149/07	00151/07	00152/07	00155/07	00156/07	00158/07
	00159/07	00163/07	00164/07	00171/07	00174/07	00176/07	00179/07
	00183/07	00194/07	00224/07	00354/07	00366/07	00378/07	00379/07
	00386/07	00439/07	00444/07	00449/07	00450/07	00510/07	00049/08
	00159/08	00391/08	00395/08	00396/08	00398/08	00399/08	00485/08
	00489/08	00493/08	00032/09	00700/09	00706/09	00024/10	00037/10
	00056/10	00302/10	00604/10	00039/11	00075/11	00132/11	00141/11
	00185/11						
MORG	00042/05	00244/04	00248/04	00012/05	00017/05	00035/05	00050/05
	00055/05	00058/05					
MORSC	00378/05	00332/05	00341/05	00366/05			
MOVE	00006/05	00327/02	00323/03	00056/04	00011/05	00013/05	00016/05
	00038/05	00113/05	00458/05	00264/09	00386/11		
MOVER	00017/05	00037/05					
MPY24	00492/09	00407/09	00422/09	00498/09			
MSEC	00199/10	00149/10	00171/10				
MSECT	00065/02	00651/09					
MSKT	00357/03	00341/03					
MTABL	00312/05	00299/05					
MTEOF	00095/09	00183/03					
MTLDR	00089/09	00106/09					
MVAL2	00233/11	00091/11	00094/11	00098/11	00153/11	00174/11	
MVALU	00238/11	00137/02	00386/03	00401/03	00403/03	00407/08	00424/08
	00024/09	00360/10	00363/10	00365/10	00391/10	00036/11	00106/11
	00126/11	00176/11					
MVEN4	00242/04	00237/04					
MYSET	00138/10	00380/09	00402/09	00090/10	00150/10	00588/10	
MVT8F	00159/10	00411/09	00114/10	00163/10	00165/10	00596/10	
•N18	00101/03						
N203	00668/09	00642/09					

N3	00428/03	00312/03	00345/03	00146/11	00160/11		
NEWSC	00116/07	00033/08	00040/08	00056/08	00072/08	00083/08	
NEWTs	00115/07	00341/06	00087/07	00091/07	00101/07	00177/07	00046/08
	00184/08	00340/09	00410/09	00425/09	00693/09	00079/10	00095/10
	00101/10	00103/10	00187/10	00190/10	00573/10	00586/10	
NFLAG	00058/02	00205/03					
NL1	00632/09	00627/09					
NMBUF	00003/06	00429/03	00447/05	00448/05	00450/05	00456/05	00460/05
	00475/05	00481/05	00487/05	00162/06	00196/06	00147/07	00150/07
	00153/07	00207/07	00209/07	00211/07	00356/09	00368/09	00268/10
	00270/10	00272/10					
NMDUP	00256/06	00293/03	00297/03	00265/10			
NMFLG	00583/02	00331/02	00493/02				
NMIGN	00580/02	00497/02					
NOFLG	00243/11	00294/10	00436/10	00491/10	00494/10		
NOMOR	00108/06	00103/06					
NORTN	00419/10	00499/10					
NOSOR	00235/11	00434/10					
NOTCO	00266/07	00298/07					
NULCK	00623/09	00029/03	00077/03	00350/06	00252/07	00326/08	00435/08
	00104/09	00632/09	00633/09	00267/10			
NUSET	00086/07	00463/06	00586/06	00092/07	00383/07	00034/10	00078/10
	00087/10						
NUTYP	00359/03	00300/03	00325/03	00342/03			
NVAL2	00234/11	00095/11	00158/11	00167/11	00172/11		
NVALU	00239/11	00405/08	00412/08	00419/08	00425/08	00364/10	00403/10
NXINC	00135/06	00139/06					
NXSET	00117/06	00353/02	00081/06	00125/06	00207/06	00517/06	00495/07
	00578/10						
NXTSC	00127/06	00102/06	00130/06	00132/06	00149/06	00153/06	00154/06
	00155/06	00526/06	00001/08	00119/10			
NXTTS	00049/02	00312/05	00339/06	00287/10	00585/10		

OFF	00585/02	00454/02	00180/03	00028/07	00457/10	00489/10
OFF1	00589/02	00373/02				
OLOSC	00506/09	00155/09	00312/09			
OPATN	00060/02	00585/04				
OPFLG	00061/02	00567/02				
OPONF	00587/04	00237/02	00455/03	00465/03	00579/04	00593/04 00689/09 00128/10
ORIGB	00324/03	00319/03				
PAUSE	00206/02	00153/03				
PBAT2	00098/03	00091/03				
PBATC	00072/03	00159/03				
PBUFF	00365/05	00348/05				
PCHEK	00223/07	00261/06	00523/06	00229/07	00235/07	00483/07 00502/07 00531/07
PCODE	00376/05	00345/05	00363/05			
PDISC	00377/05	00243/05	00344/05	00346/05	00372/05	
PDSC	00344/05	00334/05				
PDUMP	00553/03	00156/03	00613/03			
PGEJ	00439/03	00037/03	00368/03	00371/03	00372/03	00447/03 00485/07
PILLG	00093/03	00304/03	00339/03	00482/03	00487/03	00526/03 00593/03 00604/03 00607/03 00625/03 00015/04 00066/04 00068/04 00070/04 00080/04 00094/04 00098/04 00103/04 00187/04 00294/04 00275/06 00335/06 00550/06 00476/07 00123/08 00167/09 00241/09 00644/09 00653/09 00249/10 00354/10 00387/10 00056/11
PMASK	00159/05	00135/05				
PMCNT	00161/05	00088/04	00103/05	00130/05	00131/05	00170/06 00246/06 00157/09 00485/10
PMISS	00278/06	00202/02	00074/03	00094/03	00278/03	00288/03 00006/04 00084/04 00107/04 00217/04 00239/04 00533/04 00257/06 00397/06 00421/06 00430/06 00432/06 00516/06 00279/07 00463/07 00501/07 00087/08 00117/08 00383/08 00387/08 00590/09 00640/09 00649/09 00235/10 00251/10 00438/10 00532/10 00026/11 00032/11 00047/11 00376/11
PMLOC	00162/05	00352/02	00358/02	00404/03	00517/03	00539/03 00540/03 00578/03 00589/03 00600/03 00037/04 00030/04 00039/04 00048/04

	00095/04	00096/04	00194/04	00221/04	00224/04	00269/04	00277/04
	00282/04	00283/04	00284/04	00288/04	00291/04	00386/04	00479/04
	00481/04	00536/04	00542/04	00549/04	00105/05	00116/05	00126/05
	00134/05	00142/05	00145/05	00146/05	00152/05	00154/05	00079/06
	00080/06	00082/06	00105/06	00540/06	00541/06	00492/07	00493/07
	00494/07	00497/07	00533/07	00545/07	00546/07	00004/08	00019/08
	00020/08	00031/08	00032/08	00035/08	00119/08	00120/08	00384/08
	00411/08	00190/09	00244/09	00256/09	00647/09	00656/09	00686/09
	00686/09	00008/10	00011/10	00013/10	00019/10	00020/10	00048/10
	00053/10	00055/10	00060/10	00062/10	00074/10	00076/10	00097/10
	00098/10	00105/10	00106/10	00243/10	00259/10	00260/10	00361/10
	00021/11	00033/11	00092/11	00317/11	00374/11	00400/11	
PMNXT	00538/03	00312/02	00316/02	00513/03	00541/03	00225/04	00264/04
	00402/04	00087/06	00534/07	00115/08	00176/09	00191/09	00199/09
	00259/09	00111/10	00115/10	00377/11			
PMS	00283/06	00231/04	00239/05	00176/06			
PMTBL	00160/05	00164/02	00165/02	00191/02	00104/05	00153/05	00663/09
	00684/09	00096/10	00435/11				
PMTST	00612/03	00515/03	00516/03	00522/03	00523/03	00528/03	00567/03
	00579/03	00590/03	00601/03				
PNTR	00558/04	00480/04	00491/04	00493/04			
PREND	00134/03	00344/02	00133/03	00137/03	00138/03		
PRG02	00700/09	00066/10					
PRG04	00037/10	00031/10					
PRG10	00377/04	00361/04	00372/04				
PRG11	00381/04	00388/04	00560/04				
PRG12	00385/04	00552/04					
PRG20	00359/04						
PRG30	00048/10	00705/09	00007/10				
PRG32	00056/10	00050/10	00052/10				
PRG36	00064/10	00044/10					
PRG50	00071/10	00702/09					
PRG60	00106/10	00100/10	00117/10				
PRG65	00161/10	00168/10					
PRG70	00119/10	00073/10	00082/10	00113/10			
PRG75	00123/10	00120/10					

PRINP 00139/03 00374/02 00519/10
PRLST 00020/03 00345/02 00557/02 00030/03 00035/03 00041/03
PROC# 00185/03 00189/02
PROCS 00145/03 00186/02 00185/03
PROG 00358/04 00155/03 00176/03
PROGX 00560/04 00529/04
PSEC 00198/10 00147/10 00174/10
PSECT 00375/05 00358/05 00368/05
PTOTL 00197/10 00688/09 00059/10 00071/10 00175/10 00186/10
PTRAK 00374/05 00328/05 00337/05 00349/05 00354/05 00357/05 00359/05
00367/05
PTSEC 00196/10 00341/09 00409/09 00424/09 00681/09 00015/10 00023/10
00088/10 00094/10 00104/10 00108/10 00110/10 00179/10 00182/10
00591/10
PURGE 00677/09 00356/02 00138/04 00209/06 00122/10 00129/10 00581/10
RBINF 00117/09 00135/02 00375/06 00043/07 00271/07 00272/07 00357/07
00362/07 00419/07 00030/09
RBUF 00181/10 00139/10
RDISC 00327/05 00510/02 00315/03 00265/05 00028/06 00453/06 00470/09
00482/09 00526/09 00180/10 00341/11
RDSYS 00265/05 00255/02 00306/02 00459/02 00122/03 00558/03 00296/05
00292/09 00431/09 00343/11
RDTSF 00170/10 00397/09 00166/10 00183/10
READ1 00041/06 00469/05 00044/06 00519/06 00506/07 00694/09
RENAM 00277/03 00173/03
REP 00250/11 00385/10
REQC 00418/03 00382/03 00412/03
REREQ 00294/06 00287/06
RESET 00486/09 00108/06 00529/06 00515/07 00318/09 00352/09 00430/09
00444/09 00490/09 00123/10
RESTR 00184/11 00159/11 00170/11

RETRY 00361/05 00203/05

REWIND 00257/03 00171/03

RN1 00344/03 00327/03

RN2 00298/03 00290/03

RN3 00310/03 00355/03

RN4 00352/03 00308/03

RNFLG 00513/09 00180/09 00198/09 00205/09 00237/09 00239/09

RNLUN 00130/03 00564/02 00573/02

RNRET 00344/10 00502/10

RNS 00371/02 00209/02 00458/02 00558/02 00067/03 00100/03 00146/03
00245/03 00251/03 00350/03 00373/03 00424/03 00466/03 00619/03
00023/04 00120/04 00125/04 00134/04 00139/04 00203/04 00210/06
00250/06 00290/06 00351/06 00485/06 00530/06 00106/07 00518/07
00523/07 00560/07 00078/08 00436/08 00079/09 00105/09 00115/09
00278/09 00447/09 00258/10 00584/10 00430/11

RNSB 00374/02 00599/02

RNSH 00426/02 00422/02

RNSI 00391/02 00411/02

RNSJ 00433/02 00153/02

RNSK 00413/02 00381/02 00384/02 00415/02

RNSL 00410/02 00403/02

RNSY 00287/06 00130/04 00522/07

RNTIM 00137/03 00276/02 00277/02 00280/02 00281/02

RONBF 00043/02 00496/03

RONLC 00496/03 00251/04 00379/04

RPRC0 00490/06 00462/06

RPRC2 00400/06 00394/06

RPRC3 00408/06 00414/06

RPRC4 00415/06 00379/06

RPRC7 00449/06 00466/06

RPRC8 00463/06 00493/06

RPRCJ 00425/06 00371/06
RPRCX 00455/06 00379/06
RPRJB 00469/06 00427/06
RPTSC 00127/08 00097/06 00504/07 00532/07 00018/08 00134/08
RRLSC 00190/04 00184/04
RSECT 00523/09 00448/07 00470/08 00488/08 00537/08 00052/09 00529/09
00211/11
RST1 00209/11 00216/11
RST2 00213/11 00201/11
RT.LF 00110/09 00486/08
RTRK 00064/02 00204/03
RUN 00263/04 00158/03
RUN2 00230/04 00280/03 00008/04 00389/08 00237/10 00049/11
RUN3 00267/04 00273/04
RUN3A 00276/04 00268/04
RUN4 00297/04 00279/04 00286/04
RWLUN 00364/05 00313/03 00346/03 00276/05 00370/05 00026/06 00451/06
00462/09 00479/09 00178/10 00549/10 00147/11 00161/11 00303/11
00322/11 00330/11 00338/11
SADMP 00455/11 00555/03
SAVDD 00502/09 00169/09 00235/09 00308/09 00317/09
SAVEA 00634/09 00027/03 00076/03 00330/03 00337/03 00349/06 00250/07
00287/07 00297/07 00323/08 00434/08 00102/09 00624/09 00254/10
SAVL 00316/06 00576/02 00309/06
SAVLN 00503/09 00348/09 00353/09
SAVML 00120/07 00338/06 00103/07
SAVPM 00157/06 00357/02 00220/04 00104/06 00109/06 00110/06 00003/08
SAVSC 00501/09 00095/06 00124/06 00148/06 00016/08 00285/09 00487/09
SAVTS 00241/11 00292/10 00547/10 00301/11 00307/11
SBDTR 00450/11 00297/09 00434/09

SBUF 00329/07 00363/07 00365/07 00367/07 00418/07 00425/07 00426/07
00282/11 00284/11 00286/11

SC1 00515/09 00286/09 00378/09 00379/09

SC2 00516/09 00156/09 00377/09 00380/09

SCALL 00198/04 00177/04

SCAN1 00116/05 00147/05

SCAN2 00121/05 00129/05

SCAN5 00148/05 00133/05

SCANR 00097/05 00159/02 00155/05 00323/10 00480/10 00316/11

SCHNL 00162/04 00099/04 00111/04 00148/04 00154/04 00120/06 00135/06
00144/06 00147/06

SCMSG 00146/08 00130/08 00131/08

SCNMV 00114/05 00110/05

SCTST 00557/07 00513/07 00549/07 00008/08

SDATE 00454/11 00358/11 00360/11 00362/11 00369/11 00370/11 00371/11
00372/11 00373/11 00445/11

SDATL 00445/11 00384/11

SEC0 00227/06 00219/06

SECTR 00036/02 00354/03 00229/06 00444/06 00294/08 00498/09 00207/11

SETNX 00294/05 00310/05 00178/07 00089/10

SETSC 00147/06 00141/06

SEXIT 00151/05 00118/05 00120/05 00125/05

SIGN 00358/03 00329/03 00336/03

SKNTR 00271/08 00287/08 00301/08 00535/08 00536/08 00564/08

SKPPR 00141/04 00063/04

SLIST 00014/08 00229/08

SLOOP 00180/04 00197/04

SLST1 00033/08 00028/08

SLST2 00045/08 00037/08

SLST3 00053/08 00074/08
SLST4 00073/08 00058/08
SLST7 00075/08 00070/08 00084/08
SLST8 00082/08 00054/08
SLSTE 00085/08 00587/03 00044/08 00404/08 00410/08 00423/08 00427/08
00359/10 00370/10 00374/10 00382/10 00102/11 00115/11
SLUNL 00014/03 00004/03 00357/11
SLUP 00251/11 00352/10 00423/10
SNXT3 00449/11 00302/05 00441/09
SOSA 00639/09 00178/03 00179/03
SPDMP 00456/11 00552/03
SPR.1 00559/06 00545/06
SPRC1 00564/06 00576/06
SPRC2 00577/06 00567/06
SPRC3 00574/06 00015/07 00032/07
SPRC4 00588/06 00585/06
SPRC5 00008/07 00573/06
SPRCX 00001/07 00590/06 00591/06 00593/06
SPROC 00540/06 00363/06
SSFLG 00069/02 00485/02 00208/03 00171/04 00121/06
SSIMP 00291/06 00095/03 00240/04 00278/06
SSPTR 00451/11 00299/09 00436/09
SSRCH 00171/04 00181/03
SSSET 00200/04 00179/04 00196/04
STBIT 00191/04 00182/04
STBUF 00107/08 00066/08
STEND 00164/05 00101/05 00119/05 00124/05 00176/05
STERR 00258/06 00256/06 00371/09
STEST 00270/08 00160/08 00161/08 00163/08 00164/08 00166/08 00167/08

	00171/08	00177/08	00182/08	00183/08	00193/08	00200/08	00201/08
	00239/08	00241/08	00342/08	00358/08	00445/08	00453/08	00553/08
	00076/09						
STIME	00452/11	00265/02	00268/02	00274/02	00278/02	00525/02	00527/02
	00543/02	00547/02					
STKTS	00106/08	00288/08	00289/08	00290/08	00293/08	00297/08	00303/08
STLEN	00272/08	00132/02	00178/02	00577/02	00456/03	00459/03	00098/05
	00268/07	00282/07	00349/07	00355/07	00409/07	00422/07	00430/07
	00064/08	00503/08	00507/08	00035/09	00327/10	00405/10	
STLUN	00001/03	00348/02	00491/02	00012/03			
STOR1	00249/06	00262/06	00268/06				
STOR2	00261/06	00255/06					
STOR3	00264/06	00253/06					
STOR4	00270/06	00265/06					
STOR5	00319/06	00273/06	00277/06				
STOR6	00336/06	00323/06	00326/06	00329/06	00332/06		
STOR7	00347/06	00343/06					
STORD	00242/07	00378/06	00566/06	00047/07	00253/07	00267/07	00269/07
	00283/07	00290/07	00296/07	00318/07	00320/07	00526/10	
STORE	00242/06	00162/03					
STORP	00514/06	00248/06					
STORR	00376/06	00407/06	00410/06				
STORX	00038/07	00361/06					
STRAB	00098/07	00346/06					
STRAK	00283/08	00100/07	00285/08	00304/08	00415/08	00349/09	00022/10
	00102/10	00109/10	00572/10				
STRDB	00258/07	00570/06	00017/07	00021/07	00244/07	00263/07	00291/07
STRDX	00282/07	00276/07					
STRK1	00289/08	00302/08					
STRP0	00518/06	00528/06					
STRP1	00520/06	00525/06					
STRP2	00526/06	00522/06					

STRR2	00395/06	00065/07						
STRX	00045/07	00067/07						
STRX1	00069/07	00048/07	00075/07					
STRX2	00076/07	00071/07						
SUM7	00504/10	00333/10	00501/10	00512/10				
SUP	00231/11	00506/10						
SUPFL	00225/11	00242/10	00324/10	00007/11	00013/11			
SVBAD	00504/09	00298/09	00433/09					
SVCUD	00228/11	00275/10	00278/10	00468/10	00070/11			
SVFLN	00229/11	00038/11	00067/11					
SVSPR	00505/09	00300/09	00435/09					
SWAP	00062/02	00371/02	00601/02					
SWPSC	00376/09	00386/09	00395/09	00398/09				
SYNTS	00050/02	00051/02						
SYSB	00274/05	00256/02	00307/02	00333/02	00460/02	00529/02	00559/03	
	00610/03	00281/05	00295/05	00298/05	00301/05	00344/11	00412/11	
SYSBF	00034/02	00146/02	00163/09	00405/09	00414/09	00438/09	00323/11	
SYSDR	00032/02	00227/04	00473/07					
SYSSC	00046/02	00091/04	00218/05	00303/05	00482/07	00279/10		
SYSTS	00051/02	00362/04	00311/05	00291/10	00590/10			
SYSTY	00030/02	00175/02	00380/02	00420/02	00456/02	00586/02	00129/04	
	00304/06	00478/06	00496/06	00553/06	00013/07	00443/10		
TBG	00025/02	00340/02	00553/02					
TBOMB	00230/05	00215/05	00245/05	00248/05				
TBREQ	00441/11	00418/11						
TBSET	00472/03	00073/03	00478/03	00479/03	00490/03			
TEMP	00005/06	00190/02	00196/02	00003/03	00010/03	00111/03	00115/03	
	00391/03	00397/03	00232/04	00245/04	00247/04	00276/04	00308/04	
	00023/05	00030/05	00054/05	00059/05	00383/06	00391/06	00054/07	
	00060/07	00314/07	00316/07	00238/08	00246/08	00247/08	00250/08	
	00251/08	00254/08	00255/08	00347/08	00351/08	00004/09	00008/09	

00548/09 00559/09 00708/09 00014/10 00016/10 00017/10 00018/10
00021/10 00368/10 00379/10 00518/10 00524/10 00355/11 00363/11

TEMP1 00217/11 00281/03 00291/03 00321/03 00331/03 00419/03 00430/03
00232/05 00167/06 00280/06 00311/06 00474/06 00480/06 00212/07
00040/11 00074/11 00133/11 00184/11

TEMP2 00218/11 00283/03 00295/03 00305/03 00309/03 00311/03 00344/03
00352/03 00420/03 00233/05 00168/06 00281/06 00312/06 00475/06
00481/06 00213/07 00043/11 00076/11 00135/11 00190/11

TEMP3 00219/11 00421/03 00137/11 00186/11

TEMP4 00220/11 00422/03 00477/10 00045/11 00084/11 00131/11 00188/11

TEMP5 00222/11 00423/03

TEND 00363/08 00340/08

TERMS 00328/07 00358/07 00368/07 00416/07 00427/07 00522/08 00280/11
00287/11

TOF 00365/03 00172/03

TRACK 00122/03 00452/02 00161/03

TRAK# 00068/02 00131/10

TRFLG 00190/05 00139/02 00463/02 00207/05 00237/05 00075/09 00664/09

TSAVE 00127/03 00188/02 00192/02 00194/02

TSEOF 00176/11 00119/11 00121/11

TSONE 00053/02 00371/05

TYEQ4 00070/02 00247/02 00249/02

TYPE 00097/03 00160/03

TYPES 00114/08 00245/06 00546/06 00460/07 00125/08 00160/09

UBB60 00144/08 00128/08

UBLNK 00165/04 00067/04 00254/09

UDIRT 00033/02 00034/02 00277/05

UDISC 00035/04 00168/03

UDNTS 00048/02 00049/02 00346/09

ULPAR 00007/06 00462/05 00188/09

UNSUP 00232/11 00508/10

UP 00455/03 00150/03 00151/03 00152/03 00184/03 00498/03

UP.1 00460/03 00125/03

UPAST 00166/04 00519/02 00060/04 00350/11

UPCOM 00164/04 00062/04

UPDVC 00306/08 00305/07 00311/08 00338/08 00354/08

UPT 00273/08 00179/08

USDIR 00131/03 00145/02 00158/04 00089/06 00114/06 00518/06 00468/07
00005/08 00193/09 00234/09 00331/09 00692/09 00559/10

USERD 00078/06 00277/03 00287/03 00005/04 00216/04 00084/06 00099/06
00100/06 00186/06 00192/06 00249/06 00386/08 00234/10 00262/10
00046/11

USR01 00082/06 00106/06

USR02 00102/06 00091/06

USRDX 00098/06 00096/06 00115/06

VALUE 00559/04 00490/04 00502/04 00510/04 00518/04

WDISC 00336/05 00348/03 00266/05 00223/06 00089/07 00417/09 00467/09
00188/10 00551/10 00305/11 00332/11 00337/11

WMOVE 00049/05 00260/02 00301/02 00515/02 00541/02 00051/05 00052/05
00061/05 00172/07 00157/08 00219/09 00698/09 00039/10 00239/10
00419/10 00347/11 00428/11

WRBUF 00576/04 00570/04

WRLN 00584/04 00571/04 00577/04

WRSYS 00266/05 00332/02 00528/02 00609/03 00308/05 00442/09 00327/11
00411/11

WRTSF 00185/10 00399/09 00167/10 00191/10

WS1 00221/06 00230/06

WSECT 00215/06 00202/06 00226/06 00139/07 00184/07 00187/07 00234/07
00001/11

XBATC 00199/03 00216/02 00595/02 00098/03

XBLBL 00444/11 00427/11

XCHAR 00468/03 00457/03

XCLEX 00198/03 00157/02 00532/02 00304/04 00314/04

XCLOK	00442/11	00389/11	00396/11	00404/11
XCUSC	00227/03	00381/09		
XCXMX	00202/03	00475/02		
XD27	00431/03	00379/03		
XD28	00432/03	00381/03		
XDLHL	00211/03	00513/02		
XDUMP	00203/03	00477/02	00592/02	00617/03
XEAEB	00433/03	00392/03	00410/03	
XEFMP	00209/03	00483/02		
XEJOB	00129/03	00219/02	00368/02	00464/02 00366/11 00409/11
XJBIN	00200/03	00466/02	00248/03	00374/04
XJFIL	00201/03	00469/02	00017/04	
XJFSC	00206/03	00285/03	00021/04	00064/11
XNFLA	00205/03	00481/02	00295/04	
XNMBU	00429/03	00317/03		
XOPTN	00585/04	00588/04		
XRTRK	00204/03	00479/02		
XSFLG	00208/03	00488/02	00201/04	
XSTOR	00103/07	00418/06	00467/06	00595/06 00077/07
XSTOV	00197/07	00144/07		
XSTR3	00147/07	00136/07		
XSTR5	00177/07	00168/07		
XSTR6	00182/07	00195/07		
XSTR7	00187/07	00181/07		
XSWAP	00601/02	00597/02		
XSYLB	00212/03	00258/02	00514/02	00346/11 00426/11
XTMP1	00430/03	00385/03	00393/03	
XTRAK	00131/10	00125/10		

XXLBL 00443/11 00345/11

XXMOD 00210/03 00252/02

•Z 00462/11